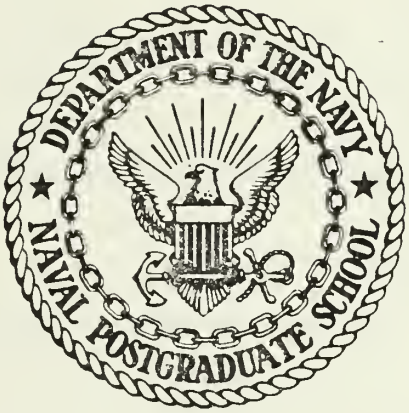
NAVAL POSTGRADUATE SCHOOL
Monterey, California



THESIS

A COST EFFICIENCY STUDY OF AVIATION
OFFICER CAREER PATTERNS AND
PERMANENT CHANGE OF STATION MOVEMENTS

by

William Thomas Ballew

December 1984

Thesis Advisor: Paul R. Milch

Approved for public release; distribution is unlimited

T221952

UNCLASSIFIED

SECURITY CLASSIFICATION OF THIS PAGE *(When Data Entered)*

REPORT DOCUMENTATION PAGE

READ INSTRUCTIONS BEFORE COMPLETING FORM

1. REPORT NUMBER	2. GOVT ACCESSION NO. / 3. RECIPIENT'S CATALOG NUMBER
4. TITLE *(and Subtitle)*: A Cost Efficiency Study of Aviation Officier Career Patterns and Permanent Change of Station Movements	5. TYPE OF REPORT & PERIOD COVERED: Master's Thesis December 1984
	6. PERFORMING ORG. REPORT NUMBER
7. AUTHOR(s): William Thomas Ballew	8. CONTRACT OR GRANT NUMBER(s)
9. PERFORMING ORGANIZATION NAME AND ADDRESS: Naval Postgraduate School Monterey, California 93943	10. PROGRAM ELEMENT, PROJECT, TASK AREA & WORK UNIT NUMBERS
11. CONTROLLING OFFICE NAME AND ADDRESS: Naval Postgraduate School Monterey, California 93943	12. REPORT DATE: December 1984
	13. NUMBER OF PAGES: 115
14. MONITORING AGENCY NAME & ADDRESS *(if different from Controlling Office)*	15. SECURITY CLASS. *(of this report)*
	15a. DECLASSIFICATION/DOWNGRADING SCHEDULE

16. DISTRIBUTION STATEMENT *(of this Report)*

Approved for public release; distribution is unlimited.

17. DISTRIBUTION STATEMENT *(of the abstract entered in Block 20, if different from Report)*

18. SUPPLEMENTARY NOTES

19. KEY WORDS *(Continue on reverse side if necessary and identify by block number)*

Career Development Naval Aviation Officers, Career Paths, Permanent Change of Station Movement, Time-on-Station, Aviation Community, Career Path Network, Turbulence, Aviation Manpower Model

20. ABSTRACT *(Continue on reverse side if necessary and identify by block number)*

This thesis presents an analysis of the professional career development of Naval Aviation Officers with respect to their Permanent Change of Station (PCS) movements. A network of representations of both successful and unsuccessful career paths of aviation officers is presented. Actual aviation assignment tour length time-on-station statistics showed decreasing officer tour lengths and, as a result, increased personnel turbulence

DD FORM 1 JAN 73 1473 EDITION OF 1 NOV 65 IS OBSOLETE

S/N 0102-LF-014-6601

UNCLASSIFIED

SECURITY CLASSIFICATION OF THIS PAGE *(When Data Entered)*

within the Aviation Community over the period 1980 to 1984. Aviation officer retention rates were varied, along with Fleet Squadron tour lengths in a sensitivity analysis using the manpower model, "Aviation Officer Requirements". This analysis showed the optimal tour lengths for the Fleet Squadron tours with respect to aviation officer PCS requirements. Recommended alterations to the aviation officer career development paths were made to reduce the number of officer PCS movements without penalty to individual members' careers.

Approved for public release; distribution is unlimited

A Cost Efficiency Study of Aviation Officer Career Patterns and Permanent Change of Station Movements

by

W. Thomas Ballew
Commander, United States Navy
B.S. Purdue University, 1969

Submitted in Partial Fulfillment of the
Requirements for the Degree of

MASTER OF SCIENCE IN MANAGEMENT

from the

NAVAL POSTGRADUATE SCHOOL
December 1984

DUDLEY KNOX LIBRARY
NAVAL POSTGRADUATE SCHOOL
MONTEREY, CALIFORNIA 93943

Thesis
B2005
c.1

ABSTRACT

This thesis presents an analysis of the professional career development of Naval Aviation Officers with respect to their Permanent Change of Station (PCS) movments. A network of representations of both successful and unsuccessful career paths of aviation officers is presented. Actual aviation assignment tour length time-on-station statistics showed decreasing officer tour lengths and, as a result, increased personnel turbulence within the Aviation Community over the period 1980 to 1984. Aviation officer retention rates were varied, along with Fleet Squadron tour lengths in a sensitivity analysis using the manpower model, "Aviation Officer Requirements". This analysis showed the optimal tour lengths for the Fleet Squadron tours with respect to aviation officer PCS requirements. Recommended alterations to the aviation officer career development paths were made to reduce the number of officer PCS movements without penalty to individual members' careers.

TABLE OF CONTENTS

I. INTRODUCTION ---------- 11

A. AVIATION COMMUNITY BACKGROUND ---------- 12

B. PERMANENT CHANGE OF STATION (PCS) ---------- 15

C. PROBLEM STATEMENT ---------- 17

II. AVIATION OFFICER COMMUNITY ---------- 22

A. ADDITIONAL QUALIFICATION DESIGNATION (AQD) CODES -------- 22

B. AVIATION COMMUNITY SIZE ---------- 24

C. INVENTORY AGING ---------- 25

III. AVIATION OFFICER CAREER PATHS ---------- 29

A. CAREER PATH NETWORK ---------- 29

B. IMPORTANCE OF TIMING IN TOUR SEQUENCE ---------- 37

C. IDENTIFICATION OF THE MAJOR AVIATION CAREER POINTS ------ 41

D. ACTUAL MOVEMENT PATTERNS ---------- 42

IV. PCS COSTS ---------- 55

A. NAVY WIDE PCS COSTS ---------- 55

B. PCS POLICY INFLUENCES NUMBER OF MOVES ---------- 56

C. AVIATION COMMUNITY PCS ---------- 59

D. TOUR LENGTHS AND PCS TURBULENCE ---------- 62

V. AVIATION OFFICER REQUIREMENTS SIMULATION MODEL ---------- 65

A. SIMULATION MODEL RESULTS ---------- 65

B. RETENTION RATES VERSUS FLEET SQUADRON TOUR LENGTHS ------ 66

C. MODEL APPLICATION ---------- 69

VI. RECOMMENDATIONS FOR REDUCED PCS MOVEMENT ---------- 71

A. INITIAL FLEET SQUADRON TOUR AND AVIATION MINIMUM SERVICE REQUIREMENT ---------- 71

B. EFFECT OF INCREASING LENGTH OF INITIAL FLEET SQUADRON TOUR ---------- 73

C. ACTUAL AT SEA TIME IN LENGTHENED INITIAL TOUR ---------- 75

D. FIVE TOUR SEQUENCE TO AVIATION COMMAND ---------- 76

VII. CONCLUSIONS ---------- 80

APPENDIX A - TRENDS IN PCS MOVES AND COSTS BY MOVE TYPE FOR THE ENTIRE U.S. NAVY FOR FYs 1980 TO 1984 ---------- 82

APPENDIX B - LISTING OF PCS ENTITLEMENTS ---------- 85

APPENDIX C - SCHEDULE OF ENTITLEMENTS AS A PRECENTAGE OF THE TOTAL NAVY PCS BUDGET ---------- 86

APPENDIX D - "AVIATION OFFICER REQUIREMENTS" EXAMPLE OUTPUT DATA: THIRTY MONTH MULTIPLE RUN SUMMARY ---------- 87

LIST OF REFERENCES ---------- 112

INITIAL DISTRIBUTION LIST ---------- 114

LIST OF TABLES

1.1 DEFINITIONS OF PCS MOVE TERMS ---------- 18

2.1 EXAMPLES OF ADDITIONAL QUALIFICATION DESIGNATION CODES ---------- 23

2.2 SQUADRON TYPES ---------- 24

2.3 CURRENT AVIATION INVENTORY ---------- 25

2.4 TRAINING REQUIREMENTS FOR PILOTS/NFOs ---------- 25

3.1 AVIATION ASSIGNMENTS ---------- 30

3.2 AVIATION ASSIGNMENT CODING ---------- 36

3.3 CURRENT AVIATION TOUR LENGTH ---------- 37

3.4 AVIATION ASSIGNMENT SEQUENCE ---------- 39

3.5 POSSIBLE TOUR SEQUENCE OF SUCCESSFUL AVIATION COMMAND SELECTEE (05) ---------- 44

3.6 POSSIBLE TOUR SEQUENCE OF AVIATOR (05) NON-COMMAND SELECTEE; RETIRES AS 05 ---------- 47

3.7 POSSIBLE TOUR SEQUENCE OF AVIATOR (04) NON-DUE COURSE; RETIRES AS 04 ---------- 51

3.8 POSSIBLE TOUR SEQUENCE OF LIEUTENANT AVIATOR (03) NON-DUE COURSE, SEPARATES FROM SERVICE ---------- 52

4.1 COST OF AVIATION PCS THROUGH THE GRADE 05 ($000) ---------- 59

4.2 NUMBER OF AVIATION COST MOVES THROUGH GRADE 05 ---------- 60

4.3 NUMBER OF AVIATION NO-COST MOVES THROUGH GRADE 05 ---------- 61

4.4 TOTAL NUMBER OF AVIATION COST AND NO-COST MOVES THROUGH GRADE 05 ---------- 61

4.5 NAVY OFFICER FREQUENCY OF TRANSFER ---------- 62

4.6 AVIATION SUBCOMMUNITY TOUR LENGTH AVERAGE (MOS) ---------- 64

5.1 AVIATION OFFICER REQUIREMENTS/NUMBER OF PCS MOVES PREDICTED AS FLEET SQUADRON TOURS 13, 14, 15 LENGTH IS CHANGED ---------- 67

5.2 AVIATION OFFICER RETENTION RATES IN PERCENTAGE AND OPTIMAL TOUR LENGTHS ---------- 70

6.1 AT SEA TIME FOR THE PROPOSED 4½ YEAR FLEET SQUADRON TOUR (DEPLOY IMMEDIATELY) ---------- 75

6.2 AT SEA TIME FOR THE PROPOSED 4½ YEAR FLEET SQUADRON TOUR (DEPLOY AFTER 6 MONTHS) ---------- 76

6.3 POSSIBLE FIVE TOUR SEQUENCES OF AVIATION COMMAND SELECTEES ---------- 78

LIST OF FIGURES

1.1 Aviation Officer Professional Development Path ---------- 16

2.1 Inventory Aging ---------- 27

3.1 Aviation Requirements Model Matrix ---------- 31

3.2 Aviation Officer Career Paths ---------- 33

3.3 Aviation Officer Career Structure ---------- 35

3.4 Timing of Billet Categories ---------- 38

3.5 Tour Sequence of Successful Aviation Command Selectee ---------- 43

3.6 Tour Sequence of Non-Command Selectee Commander ---------- 48

3.7 Tour Sequence of Lieutenant Commander Retiree ---------- 50

3.8 Tour Sequence of Lieutenant Aviator Separatee ---------- 53

4.1 Percentage of People Moving for Each Service (Excluding Accessions and Separations) ---------- 58

6.1 Early Tour Sequence (Current and Proposed) with Aviation Minimum Service Requirement ---------- 72

6.2 Tour Sequence of Five Tour Aviation Command Selectees ---------- 77

ACKNOWLEDGEMENT

The author would like to thank the members of the OP-13 and NMPC-46 staffs who provided assistance in the preparation of this thesis. Special thanks to Mr. F.E. O'Conner of Information Spectrum, Inc., author of the model, "Aviation Officer Requirements", and Ms. Charlotte Byers' for her computer programming expertise, time, and patience.

I. INTRODUCTION

The development of future Aviation Officer careers will become more difficult as Permanent Change of Station (PCS) funds become harder to obtain. Faced with huge two hundred billion dollar deficits, both Congress and the Executive branch will be looking at virtually every appropriation line item to determine where budget cuts can be taken. The Defense Department, and specifically the Department of the Navy is committed to the build-up of a 600 Ship Navy by the end of the 1980s decade. As ship, aircraft, and weapon procurement costs show no sign of slowing their rate of growth, the area where Naval military budget reductions are likely to come are Congressional appropriations for Personnel. It has become an annual occurrence at budget hearings, both in the House and Senate, to discuss the Navy's personnel movement policies. These policies, along with associated increases in funding requirements, are coming under greater scrutiny each budget year as the force is increased to man the additional ships and aircraft squadrons.

Aviation is one of three major warfare specialties that an officer can pursue in making the Naval Service a career. The others are Surface Warfare and Submarine Warfare. These three warfare specialties, together, make up what is known as the Unrestricted Line Officer (URL) Corps. URL officers are eligible to command combatant ships and aircraft squadrons, whereas, the other officer branches of the Naval Service, the Restricted Line (RL) and Staff Corps, are not. The distinguishing feature about Aviation URL officers is that they are all

involved in some facet of Naval aviation as a primary career pursuit [Ref. 1:p. 37].

The Service expects and demands of its aviation officers: demonstration of expert aviation skills, adroit personnel management of more junior officers and enlisted personnel, and professional development gained through increasingly challenging job assignments, graduate schooling and service college. Additionally, those aviators successful in their career performance, particularly during their aviation department head assignment, are selected to head the various units and air squadrons as Commanding Officers.

This thesis will explore the conflict that has developed between the aviation officers' need to change assignments in order to gain the necessary professional development for higher grade promotion and command selection, and the continual pressure to reduce costs in the movement of aviation officer personnel.

A. AVIATION COMMUNITY BACKGROUND

The Naval Aviation Community is known as the 1300 or 13XX Community because it is made up of pilots designated 1310 or 1315 (depending on whether regular or reserve), and Naval Flight Officers (NFOs) designated 1320 or 1325. The Aviation Community consists of approximately one-half of the Unrestricted Line Officers in the Navy. Every aviator has a detailer whose job it is to look out for the individual interests of those aviators assigned to him. Aviation detailing duties are divided up by aviation subcommunities. The detailers provide counseling and make nomination assignments for upcoming job or "billet" vacancies for

their constituencies. This is done at or near the end of an assignment, the projected rotation date (PRD). The individual aviator usually gets in touch with his detailer six to nine months prior to his PRD to find out what openings will be available. These job openings are known as the "slate". Each detailer is given only a few specific openings to fill. The detailer looks at his assignee's officer performance records and discusses or "nominates" an individual for a specific billet. The detailer then takes the nomination to the Placement Officer, who initially placed the job opening on the slate. A Placement Officer is much like a detailer, but his job is to look out for the interest of the command in which the job opening is occurring. The Placement officer then evaluates the nominee attempting to match his past demonstrated performance with the future assignment. Better performance enables an individual to be offered and assigned to more challenging and career enhancing billets.

An aviator when discussing possible assignments with his detailer must face what is termed the "triad of detailing" in selection of his next billet. The "triad" consists of (1) the needs of the Navy, (2) the individual's needs, and (3) the individual's desires. The needs of the Navy are foremost. If the Navy is short of aviators because retention is low, then the Aviation Training Command tends to become a driving requirement. The individual up for assignment may be offered only one type of assignment, in this case, the Training Command. The individual's needs are next in importance. The detailer will counsel and guide the individual into billets that are necessary for professional growth and development. They will also advise on billet

sequence and timing of assignments within a career, which is discussed in detail in Chapter III, Section B. Lastly, the individual's personal desires are considered in the assignment process. These personal desires vary for each individual aviator and cover everything from location, type billet, squadron or staff, and sea or shore assignment. The triad is not an equally balanced system but the detailer's job is to attempt to strike some balance among the three constraints.

Aviators come from a variety of commissioning sources: Naval Academy, Naval Reserve Officer Training Corps, Aviation Officer Candidate School, and Officer Candidate School. Members of the Aviation Community undergo initial training from twelve to eighteen months duration in earning their "wings".

Once a Naval Aviator completes his/her flight training, an "initial obligation" or payback tour is incurred due to the high cost of this training. These costs are currently quoted at approximately three quarters of a million dollars for each individual pilot [Ref. 2]. The payback tour length has varied over time, but it has been getting longer in recent years due to these increasing training costs. It is currently running at five years of active duty service obligation from the date of flight training completion.

After a pilot receives his/her wings, and depending on the current needs of the Service, (and to some extent on personal preference) these individuals are issued their first set of orders for more advanced flight training. This advanced training is done in actual operational aircraft at a Fleet Readiness Squadron (FRS).

The length of the typical FRS training is six months. The new aviators have the job of learning to fly the aircraft they will be flying in the fleet. Additionally, they will be introduced to the specific missions and capabilities of that aircraft.

Figure 1.1 from The Unrestricted Line Officer Guidebook is provided to show an illustration of typical aviation officer careers. Chapter III will go into greater depth analyzing the aviation officer's career. The sequence of billets as shown in Figure 1.1 for the successful officer is far from being rigid. As stated in the CNO Study Directive [Ref. 3] for the Officer Corps Management Studies, current officer rotational policy centers on:

1. fleet readiness, which depends on getting the right officer into the right billet;
2. individual officer preference; and
3. PCS cost considerations

B. PERMANENT CHANGE OF STATION (PCS)

As an aviation officer progresses through a sequence of billets during his career, it is necessary for him to move from one assigned tour to another. More often than not this move involves a change in geographic location. An area where much has been done to reduce relocation costs has been the Navy's "homesteading" program. For example, an aviation officer completing a Ship's Company Afloat tour aboard one of the aircraft carriers based in San Diego could rotate ashore to an FRS located in the area or to one of several Shore Staff billets. Homesteading, however, can only provide partial relief to the problem of PCS cost, because movement to different locations is often

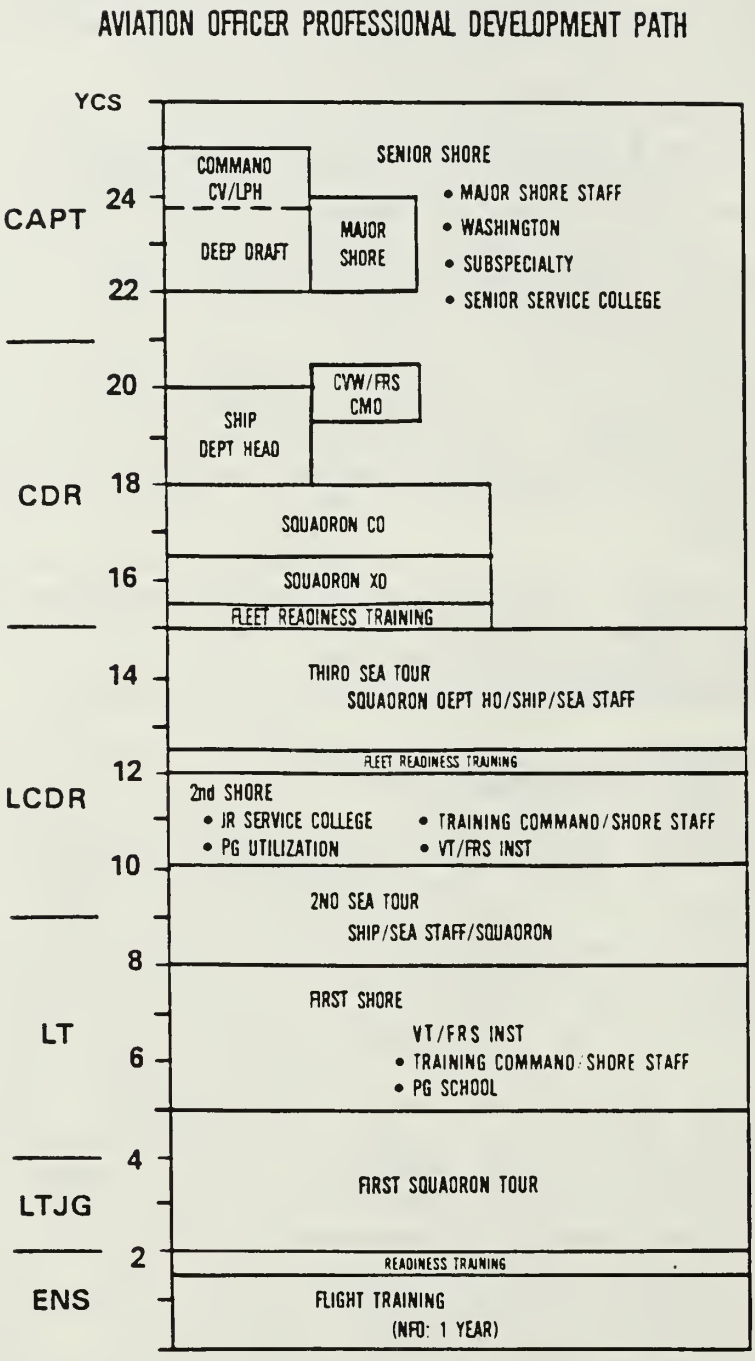


Figure 1.1 Aviation Officer Professional Development Path

required of aviation officer personnel after a completed assignment due to geographic dispersion of the Naval Air Stations.

Before proceeding further a list of PCS movement terms and their definitions are provided in Table 1.1 [Ref. 4:pp. 1-3]. The Naval Service has a limited amount of money for funding PCS moves as appropriated and authorized by Congress. Because of this constraint the Naval Military Personnel Command (NMPC) must spend the budgeted money wisely. Quoting from the Senate Appropriations Committee discussions on the Military Personnel Navy FY-85 request for Permanent Change of Station funding,

> Permanent change of station program growth [has been unfavorably noted;] The Committee is also aware that the average planned tour length for Navy members has been decreasing, and in fiscal year 1985 it is substantially shorter than in fiscal year 1982. The Committee does not support shorter tour lengths and recommends lessening the Navy's request for funding by $5,200,000.00 to encourage the Navy to reverse this trend.

However, the reduction of PCS moves is in apparent conflict with the Aviation Officers' career needs, among them the officer's need to command. In order for an officer to be selected for aviation command, he must have met certain operational requirements during various assignments, demonstrated competency in Aviation Warfare and leadership capabilities, as well as exercised sound judgement in his various duties during his career. This varied experience is gained only by regular rotation between sea and shore assignments.

C. PROBLEM STATEMENT

This thesis will review and recommend improvements in the efficiency of officer career paths with respect to PCS changes, while still meeting

TABLE 1.1

DEFINITIONS OF PCS MOVE TERMS

PCS: Permanent change-of-station by an individual officer. Unlike the other services, PCS moves in the Navy include retours in the same geographic area where little or no cost to the Navy is involved.

Operational moves (OP): PCS moves where travel across ocean waters is not required; e.g., moves within CONUS (Continental United States) or moves within Europe by land travel.

Rotation moves(ROT): PCS moves where transport across ocean waters is required; e.g., moves between CONUS and Europe or moves between Korea and Japan.

Non-accession Training moves(TRA): PCS moves to/from training sites where training duration is 20 weeks or longer (Travel for training of less than 20 weeks may be part of OP, ROT, or TRA moves).

Mandatory moves: Accession, Separation, and Organized Unit moves as explained below:

Accession moves: All moves made by the new officer to reach his or her first permanent active duty station, including moves to initial entry point in the Navy, training, and to the first duty station.

Separation moves: Moves made by the individual officer when he or she separates from the Navy.

Organized Unit moves: Moves made by the individual officer as a part of a whole unit moving (e.g., transfer of a ship or Squadron to another homeport).

PRD: Projected Rotation Date is the date when the individual officer is due to make a PCS move in accordance with the prescribed tour length policy.

minimum essential career development needs within the Aviation Officer Community. The President's Private Sector Survey on Cost Control (PPSSCS), 1983, known as the Grace Commission [Ref. 5:pp. 165-166], also noted increased PCS cost in the Navy Officer Corps. Among the many recommendations the Commission stated that,

> The heart of this consideration is better planning of which billets to fill, longer tenure in jobs so that greater depth of knowledge can be obtained, less frequency in the number of moves to be arranged, and better service to the Navy.
>
> Inherent in better management of the careers of officer personnel are several benefits:
>
> - o Improvements in individual productivity [efficiency]
> - o Improvements in overall Navy readiness [effectiveness]
> - o Reduction of pipeline training [efficiency]
> - o Reduction in costs associated with rotations [cost/benefit]

The PCS movement of the aviation officer has become a military way of life. The Grace Commission's charter was to compare the military methods with good cost effective ways of doing business in the civilian sector where there exists a bottom line, namely "profit". This same theme of comparison with civilian business comes through in Arima's discussion of civilian policy on movement in his study Organizational Handling of Midcareer Moves: The Reactions of Navy Line Officers [Ref. 6:p. 1].

> While frequent moves were accepted as an inevitable part of managerial careers in the rapid growth of industries after World War II, and continuing into the '60s, there has been a decline in the frequency of moves since the decade of the '70s (Korn, 1974).

J. Ronald Fox in his book, Arming America [Ref. 7:pp. 77-78] points out,

> It is always difficult within any bureaucracy to measure the effectiveness of specific management practices. This is particularly true in the Department of Defense, which operates without the profit incentive and which, even in peacetime, does not use any of the normal commercial techniques for measuring adequacy or efficiency. In most

small and medium-sized commercial business operations, the effectiveness and efficiency of an operation can be measured annually, and sometimes monthly. In large business organizations, the full effect of top-level decisions may not be fully observed for a number of years. But even in these organizations, cost effectiveness is measured regularly, in order to analyze the impact of management decisions on long-term profits and the efficiency of ongoing operations.

In a formal management study done in 1965 for the services, one of the main points the report cited as a serious problem was too frequent turnover of military personnel. Again in 1971 the Comptroller General issued reports to Congress citing turnover of military personnel. The recommendations included in the 1965 report were repeated in 1971 [Ref. 8].

Before taking over as Secretary of Defense, James Schlesinger is quoted as commenting about the Department of Defense that, "Large hierarchical organizations tend to be remarkably efficient mechanisms for the suppression of new ideas and alternatives"[Ref. 9:p. 105]. That may explain why the Navy has resisted the increase in tour lengths for decades, a recommendation that was cited in numerous DOD management studies:

- o 1965 Management Study
- o 1971 Comptroller General report
- o 1983 Grace Commission report
- o 1984 DOD IG Audit on Postgraduate Education

As Arima [Ref. 6:p. 8] in 1981 pointed out, a positive relationship has been consistently found between job satisfaction and job tenure. People are more satisfied in an assignment with some amount of stability. CNO after CNO have continually pointed out that the most valuable weapon against a perceived threat is the Naval personnel who man the ships, and aircraft. Yet, given that forty-four percent of the aviation community

moved this past fiscal year, as will be discussed in Chapter IV, Section D one gets the picture of a highly unstable organization. If profit was the Navy's motive, bankruptcy could be close at hand.

With a President and Administration facing deficits of upwards of $200 billion dollars and committed to a 600 ship Navy with inherent personnel increases, cost cutting and efficiency measures are to become the rule. The armed service that can propose the most in reduction of cost and increased efficiency measures will be the winner in the scramble for the reduced funds available. The game will become, "who can out-'Grace' the Grace Commission".

II. AVIATION OFFICER COMMUNITY

A. ADDITIONAL QUALIFICATION DESIGNATION (AQD) CODES

In most studies involving Naval aviation careers the various aviation missions are usually broken down into five major categories that may be thought of as subcommunities within the Aviation Community [Ref. 10:p. 29]. These subcommunities are:

- o JET PILOT: Pilots of jet powered aircraft
- o JET NFO : Naval Flight Officers of jet powered aircraft
- o PROP PILOT: Pilots of propeller driven aircraft
- o PROP NFO : Naval Flight Officers of propeller driven aircraft
- o HELO PILOT: Pilots of helicopter type aircraft

The five subcommunities are further broken down into unique aviation warfare specialties which in turn imply specific type of aircraft. The Navy keeps track of these specialties by assigning Additional Qualification Designation (AQD) codes which are found in section C of the Navy's Manual of Officer Manpower and Personnel Classifications. [Ref. 11] Examples of these AQD codes and the relevant aircraft types can be found in Table 2.1.

These five categories are essentially distinct since rarely does an individual aviator cross over into a different major category. This may happen when a major change occurs in aircraft type. For example, when the propeller driven Antisubmarine Warfare (ASW) carrier aircraft, the S-2E/G, was phased out of the Navy's inventory and replaced by the jet powered carrier aircraft, the S-3A, the majority of the pilots and the small number of NFOs involved transitioned to the jet community.

TABLE 2.1

EXAMPLES OF
ADDITIONAL QUALIFICATION DESIGNATION CODES

MISSION CLASS	AQD CODE	MISSION/TYPE	AIRCFT. IDENT.
		JET AIRCRAFT (PILOT/NFO)	
ATTACK	DA2	LIGHT ATTACK	A-7
	DA4	MEDIUM ATTACK	A-6
	DA7	LIGHT ATTACK	FA-18
FIGHTER	DB2	FTR/BOMBER	F-4
	DB4	FTR/BOMBER	F-14
	DB6	FTR/BOMBER	FA-18
TRANSPORT	DE3	HEAVY JET	C-9
ASW	DF2	CARRIER ASW	S-3
		PROPELLER AIRCRAFT(PILOT/NFO)	
ASW	DJ4	ASW PATROL	P-3C
TRANSPORT	DQ4	TRANSPORT HVY	C-130
	DS2	CARRIER TRANS	C-2
COMBAT SUPPORT	DL3	CARRIER AEW	E-2C
		HELICOPTER(PILOT)	
ASW	DV2	ASW (LAMPS)	SH-2
	DV4	ASW (LAMPS)	SH-60
	DV1	ASW	SH-3
COMBAT SUPPORT	DW4	SAR/LOGISTICS	UH-3

The Aviation Requirements Model [Ref. 12:pp. 29-30] developed by F.E. O'Conner handled the AQD problem by dividing the community by squadron types into the logical categories given in Table 2.2. There are some major differences in the career paths of officers of the different warfare specialties listed in Table 2.2. These will be discussed further in Chapter III.

TABLE 2.2

SQUADRON TYPES

PILOTS	NFO
LIGHT ATTACK	
FIGHTER	FIGHTER
MEDIUM ATTACK	MEDIUM ATTACK
ELECTRONIC WARFARE	ELECTRONIC WARFARE
CARRIER BASED ASW	CARRIER BASED ASW
FORCE SUPPORT-JET	FORCE SUPPORT-JET
EARLY WARNING	EARLY WARNING
MARITIME PATROL	MARITIME PATROL
ELECTRONIC WARFARE (VQ)	ELECTRONIC WARFARE (VQ)
FORCE SUPPORT-PROP	FORCE SUPPORT-PROP
HELICOPTER ASW	
LAMPS MK I	
LAMPS MK III	
FORCE SUPPORT-HELO	

B. AVIATION COMMUNITY SIZE

At the end of August, 1984 the aviation officer inventory had the make-up shown in Table 2.3. (Data supplied by OP-130.) The Pilot Training Requirements (PTR) for fiscal years 1984-89 are projected to be as shown in Table 2.4. (Data supplied by OP-130.) The thirteenth Carrier Air Wing comes up to manning levels this year, and a fourteenth is scheduled for FY 87; hence the increased PTR through FY 89 in Table 2.4.

TABLE 2.3

CURRENT AVIATION INVENTORY

GRADE	PILOTS	NFOs	TOTAL
05	1737	632	2369
04	2544	1389	3933
03	3269	1906	5175
02	1712	910	2622
01	175	173	348
TOTALS	9437	5010	14447

TABLE 2.4

TRAINING REQUIREMENTS FOR PILOTS/NFOs

FY	PILOTS	NFOs	TOTAL
84	869	475	1344
85	925	512	1437
86	985	520	1505
--	--	--	
89	1060	534	1594

C. INVENTORY AGING

When an officer leaves a billet position the Navy cannot go out and advertise for a like replacement. Also if a position calls for a Lieutenant Commander (04), an Ensign (01) cannot be expected to replace him. Thus the Navy is forced into what is termed, "growing its own", which is quite different from the options the civilian community has in filling its vacancies. It currently takes four years of commissioned service for an aviation officer to attain the grade of Lieutenant, a total of nine years for Lieutenant Commander and fifteen years of commissioned time for Commander. The Navy does, however, have a policy of detailing a small percentage of officers of each grade up one grade or down one grade to fill vacancies when grade imbalances become acute.

A Lieutenant filling a Lieutenant Commander billet would be in a career enhancing position, but generally a Lieutenant would try to avoid being detailed to a Lieutenant Junior Grade billet.

Figure 2.1 is a duplicate of the figure shown in the model "Aviation Officer Requirements" quoted in Section A. In this figure, the horizontal axis represents the years of service since aviation designation, which is the point indicated by the origin. The vertical axis indicates the number of aviation officers in a service cohort as a function of time. As the graph shows, this number is represented by a polygonal line. The negative slope of the line at any point in time is the rate of aviation officers are leaving the Naval service. The steeper the slope of the line, the greater the number of aviation officers leaving. The Minimum Service Requirement (MSR) point is the time at which an aviator has completed his initial military service requirement. It is approximately at the five year point. This minimum obligated service is incurred at the time of completion of flight training. The "retention rate" of Naval Officers is defined as the ratio of the number of Naval officers at two years after MSR (referred to as MSR+2) to the number of Naval officers at one year prior to MSR (referred to as MSR-1). Of course, a separate retention rate may be computed for any branch of the Navy officer Corps, e.g., the Aviation Community. A Career Stable Point (CSP) occurs approximately twelve years after aviation designation. The slope of the line from CSP to the eighteenth year of designation is relatively flat, thus indicating that very few aviation officers are leaving the service during this period.

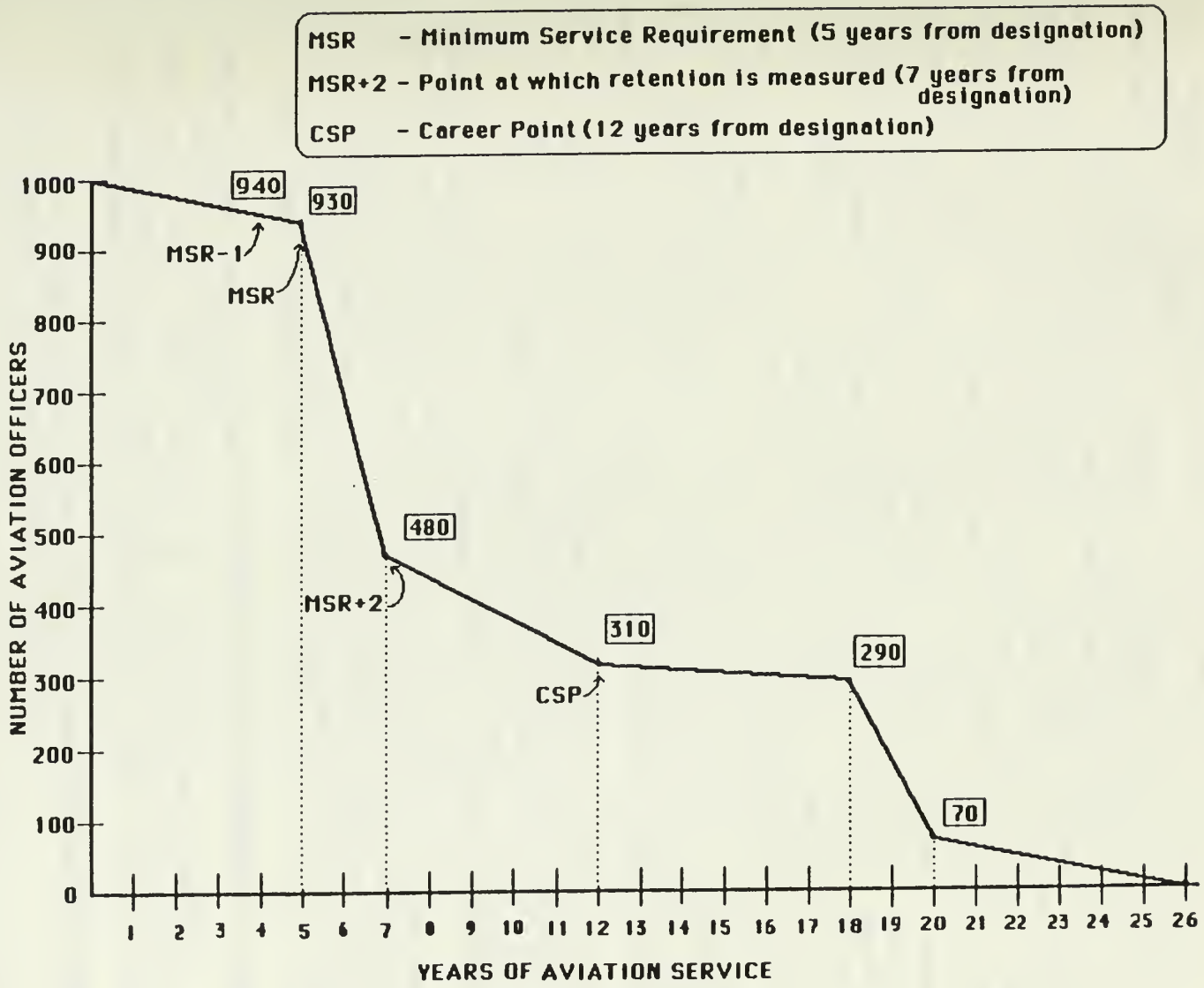


Figure 2.1 Inventory Aging

The slope again increases beyond the eighteenth year as aviation officers reach the twenty year retirement point. [Ref. 12:pp. 17-20]

In Figure 2.1, 1000 aviation designations occur at time zero. With a fifty percent aviation retention rate as shown in this example, 930 aviation officers are remaining at the MSR point. However, at the MSR+2 point, only 480 aviation officers remain in the service due to low retention rate in this example. At the Career Stable Point (twelve years of aviation service), 310 aviators remain. Using a forty-five percent Command selection opportunity, an original cohort of one thousand can expect approximately 130 perspective Commanding Officer selections by the eighteenth year point in time.

One of the aviation detailer's jobs is to keep as many of their constituents as possible competitive for officer grade promotion and eventual command screen selection. However, an aviator is in the Naval service nine years before any real quality cut is made. This occurs during the Lieutenant Commander promotion board. As seen in the preceeding paragraph, the 130 Commanding Officer selections represent approximately thirteen percent of an original cohort of one thousand. Civilian management studies of the military personnel movement system point out what seems to them as "gross inefficiencies" and resulting high "unnecessary" PCS costs in moving about these large numbers of aviation officers who stay in service less than nine years [Ref. 13:p. 5]. This is precisely where meaningful dollar savings in PCS funds would occur if policy changes were to be made.

III. AVIATION OFFICER CAREER PATHS

A. CAREER PATH NETWORK

As is shown by Figure 1.1, there are several possibile sequences of assignments for an aviation officer. After initial flight training, about ninety-five percent of all aviators go to their initial fleet squadron assignment. The other five percent are retained in the Aviation Training Command as instructors for their first tour and are called "SERGRADS", Selective Retained Graduates. SERGRADs currently number only about 160 and their category is being phased out as both pilot and NFO retention statistics enjoy historic highs. If and when retention drops the SERGRAD program remains a viable option as a quick fix for the shortage of aviator instructors.

O'Conner's Aviation Oficer Requirements Model, as mentioned in Chapter II, developed some general assignment rules with regard to aviation community career paths [Ref. 14:p. 17]. These are:

1. SERGRAD instructors are guaranteed a follow-on Fleet assignment;
2. Fleet Readiness Squadrons (FRS) are assigned only officers rotating from fleet squadrons;
3. Aviators will only have one Aviation Training Command assignment below the grade of 04;
4. A Maximum of two successive out-of-cockpit assignments are permitted;
5. Aviation Officers begin their second aviation fleet tour no later than the 12th year from aviation designation.

These general assignment rules have been verified by OPNAV130 personnel. An exception to the general assignment rule cited in number four above

is when a Lieutenant aviation officer attends Postgraduate schooling. In most cases, after this officer completes his education, he rotates to a non-flying afloat assignment, and then serves in a validated education required billet. In this case, a total of three successive out-of-cockpit tours would have been served.

In O'Conner's model there are seven general areas an aviator may be assigned. These are listed in Table 3.1. Separation from the Service is represented as the eigth area.

TABLE 3.1

AVIATION ASSIGNMENTS

ASSIGNMENT TYPE	FIRST DIGIT
FLEET SQUADRON	1
FLEET READINESS SQUADRON	2
AVIATION TRAINING COMMAND	3
RESEARCH AND DEVELOPMENT SQUADRON	4
AFLOAT (SHIP'S COMPANY)	5
PROFESSIONAL DEVELOPMENT	6
OTHER	7
SEPARATION	8

Referring to Figure 3.1 each tour is represented by a two-digit number as was developed by O'Conner. The Assignment Type as given in Table 3.1 and also shown on the left hand margin in Figure 3.1 is represented by the first digit of the tour number. The second digit in this two-digit number refers to the order of the tour in the sequence of tours of an individual aviator's career. This way the number 1 in the second digit refers to the first tour assignment after the initial training which is labeled with a 0. Therefore, tour 31 means Aviation Training Command as a first tour. This is the SERGRAD assignment

2	FLEET READINESS SQUADRON		(21)	(22)	(23)	(24)	(25)	(26)
3	TRAINING COMMAND		(31)	(32)	(33)	(34)	(35)	(36)
4	RESEARCH & DEVELOPMENT		(41)	(42)	(43)	(44)	(45)	(46)
1	FLEET SQUADRON	(10)	(11)	(12)	(13)	(14)	(15)	(16)
5	AFLOAT		(51)	(52)	(53)	(54)	(55)	(56)
6	PROFESSIONAL DEVELOPMENT		(61)	(62)	(63)	(64)	(65)	(66)
7	OTHER		(71)	(72)	(73)	(74)	(75)	(76)
8	SEPARATION		(81)	(82)	(83)	(84)	(85)	(86)
	TOUR NO.	0	1	2	3	4	5	6

Figure 3.1 Aviation Requirements Model Matrix

previously discussed. Tour 11 represents the first Operational Fleet Squadron assignment immediately following initial flight training (tour 10). Tour 53 represents an afloat assignment (non-flying) as a third tour in the sequence of assigned tours of an aviator. Tour 24 represents an assignment in a Fleet Readiness Squadron during the fourth tour assignment. This representation of aviation officer career paths will be used in Section D to explain actual movement patterns of many individual careers.

Figure 3.2 is another way of depicting aviation career pathways, using a further development of Morris' idea [Ref. 15:p. 69]. Morris' career depiction method has the initial advantage over O'Conner's in that career path lines do not crisscross over one another causing confusion in following a specific career pattern. However, the two-digit tour numbering system is maintained in Figure 3.2. As an example, a successful aviation career pattern using Figure 3.2 is presented here.

The initial box labeled 10, in Figure 3.2, represents the initial flight training tour and is the starting point of an aviation career. The first tour after training, Fleet Squadron (tour 11), is the primary route taken by the majority of aviation officers. Only primary career path routes are shown in this figure. Other career path routes do exist and will be shown and discussed later using Figure 3.3. From tour 11, in Figure 3.2, the successful aviation officer may rotate to shore duty to a tour at a Fleet Readiness Squadron (tour 22). From tour 22, the career pathway route may take this hypothetical officer to sea again aboard an afloat unit in a billet not involving actual flying (tour 53).

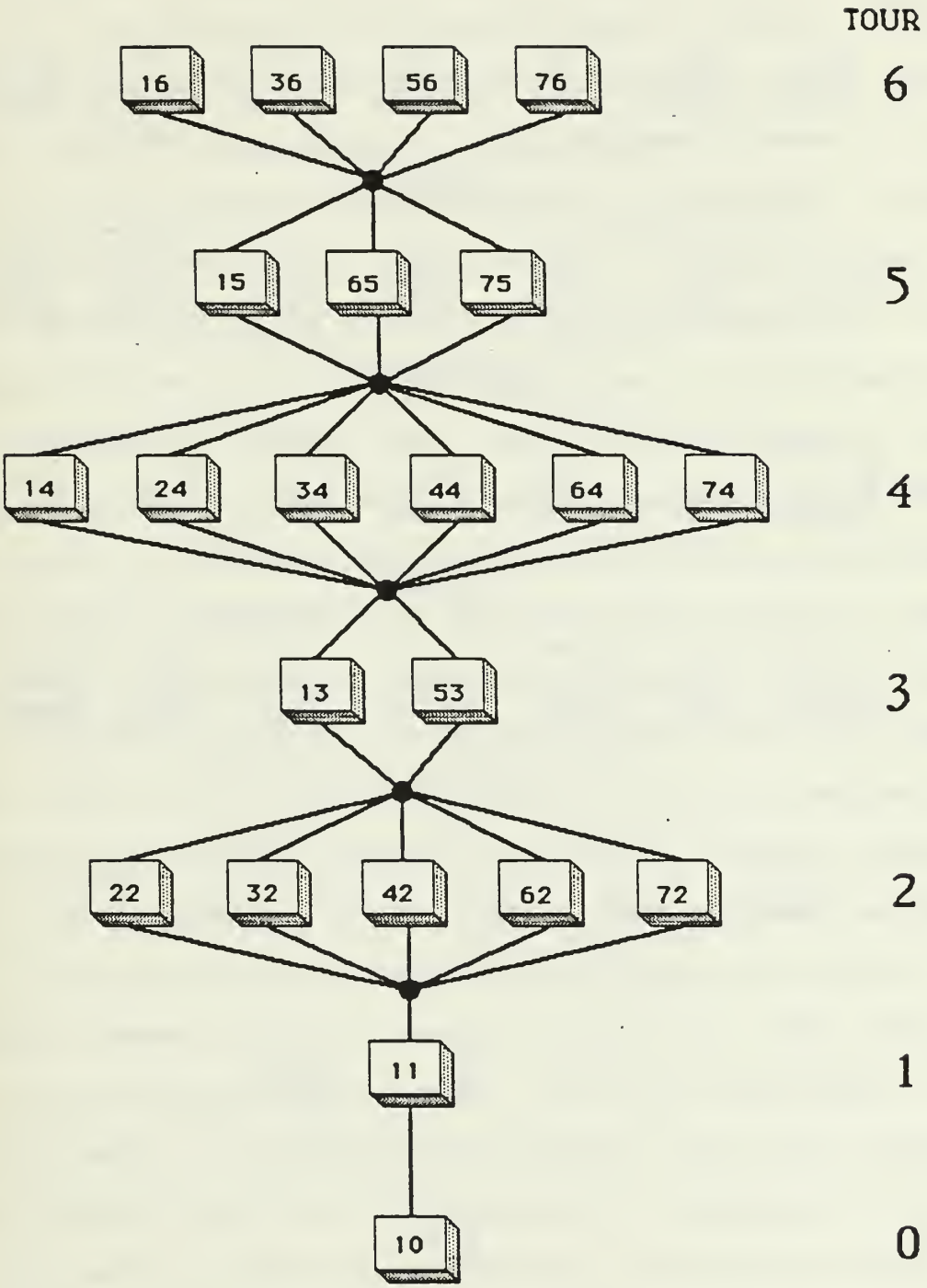


Figure 3.2 Aviation Officer Career Paths

From tour 53, this aviation officer may rotate ashore to Professional Development (tour 64) at the Naval War College. From tour 64 rotation back to sea in the Aviation Department Head assignment is represented by tour 15. Aviation Command screening having been successful in this example allows this officer, to rotate into the billet of XO/CO (tour 36) and serve as Commanding Officer of an Aviation Training Command squadron. Other similar career paths may be followed using Figure 3.2.

Figure 3.3 displays the same primary career pathway information as Figure 3.2, but the less utilized pathways are added with these added tours depicted by triangular shaped boxes and the corresponding pathways shown as dashed connecting lines. The triangle 31 stands for the SERGRAD Training Command assignment. From there, following the dotted line pathway to triangle 12, the SERGRAD officer does his initial fleet squadron during the second tour. It is because of this SERGRAD pathway that all other assignments along dotted lines are possible. Tour 52, Afloat Second Tour, is missing in Figures 3.2 and 3.3 to indicate that this pathway is "barred" to the aviator coming from the initial fleet squadron (tour 11). Continuing one possible SERGRAD pathway through to completion, after the Fleet Squadron (tour 12) is complete, this officer is assigned to a Research and Development Squadron (tour 43). The following tour, this officer is rotated to a Ship's Company assignment as a staff officer (tour 54). After the Afloat tour (tour 54), a subsequent sea duty assignment involving flying in a Fleet Squadron (tour 15) is completed. In this example, this officer failed to select as a Commanding Officer during the Aviation Command screening process, and was assigned to a shore staff billet (tour 76).

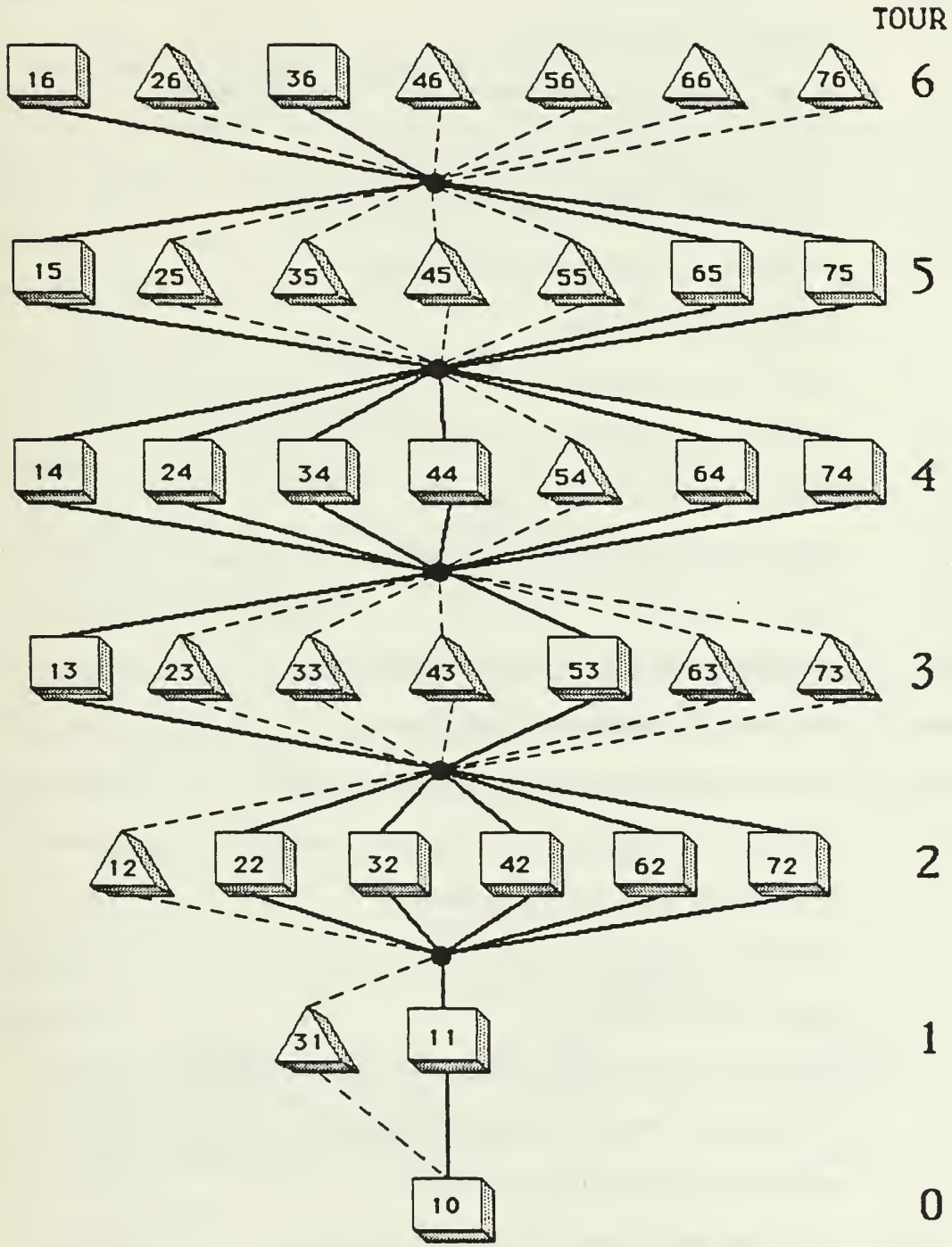


Figure 3.3 Aviation Officer Career Structure

TABLE 3.2

AVAIATION ASSIGNMENT CODING

TWO-DIGIT CODE	AVIATION ASSIGNMENT	OFFICER GRADE
10	INITIAL FLIGHT TRAINING	ENS
11	FIRST OPERATIONAL FLYING TOUR (FLEET SQUADRON)	LTJG/LT
22	FLEET REPLACEMENT SQUADRON (INSTRUCTOR)	LT
32	AVIATION TRAINING COMMAND (INSTRUCTOR)	LT
42	RESEARCH & DEVELOPMENT SQD (SHORE)	LT
62	POSTGRADUATE SCHOOL	LT
72	STAFF DUTY (SHORE)	LT
13	SECOND OPERATIONAL FLYING TOUR (NON-DEPT. HEAD)	LT/LCDR
53	AFLOAT (STAFF, SHIP'S COMPANY)	LT/LCDR
14	DEPARTMENT HEAD (FLEET SQUADRON)	LCDR
24	FRS INSTRUCTOR	LCDR
34	AVIATION TRAINING COMMAND (INSTRUCTOR)	LCDR
44	RESEARCH & DEVELOPMENT SQD (SHORE)	LCDR
64	POSTGRADUATE SCHOOL/JR. SERVICE COLLEGE	LCDR
74	STAFF DUTY (SHORE)	LCDR
15	DEPARTMENT HEAD (FLEET SQUADRON)	LCDR
65	SERVICE COLLEGE	LCDR/CDR
75	STAFF DUTY (SHORE)	LCDR/CDR
16	COMMANDING OFFICER (AVIATION TRAINING COMMAND)	CDR
36	COMMANDING OFFICER (FLEET SQUADRON)	CDR
56	NON-SCREENED (COMMANDER AFLOAT)	CDR
76	NON-SCREENED (COMMANDER STAFF DUTY)	CDR

Table 3.2 is a detailed listing of most aviation assignments showing the two-digit coding system and the probable officer grade at each tour.

B. IMPORTANCE OF TIMING IN TOUR SEQUENCE

Some discussion is in order as to the length of various tours. Article 1820180 of the Naval Military Personnel Manual [Ref. 16] states in paragraphs 9 and 10:

"Normal tours of sea duty for line officers are:

a. Two years for Commanders and above
b. Two to three years for officers below the grade of Commander;

"Normal tours of shore duty for line officers are:

a. Three years for Captains and above
b. Two and one-half to three years for Commanders
c. Two to three years for officers below the grade of Commander"

These constraints, therefore, leave some flexibility as to tour lengths for the majority of URL officers, including Aviators and NFOs. Detailing officers write orders for their aviation officer constituents with tour lengths as summarized by Table 3.3.

TABLE 3.3

CURRENT AVIATION TOUR LENGTH

TOUR	YEARS	GRADE
FIRST OPERATIONAL FLYING TOUR	3	LTJG/LT
DISASSOCIATED SEA DUTY TOUR	2	LT
SECOND OPERATIONAL FLYING TOUR	2½	LCDR
THIRD OPERATIONAL FLYING TOUR	2½	CDR

Figure 3.4 is a superposition of the two-digit coded assignments as specified in Table 3.2 using the tour lengths given in Table 3.3 on the

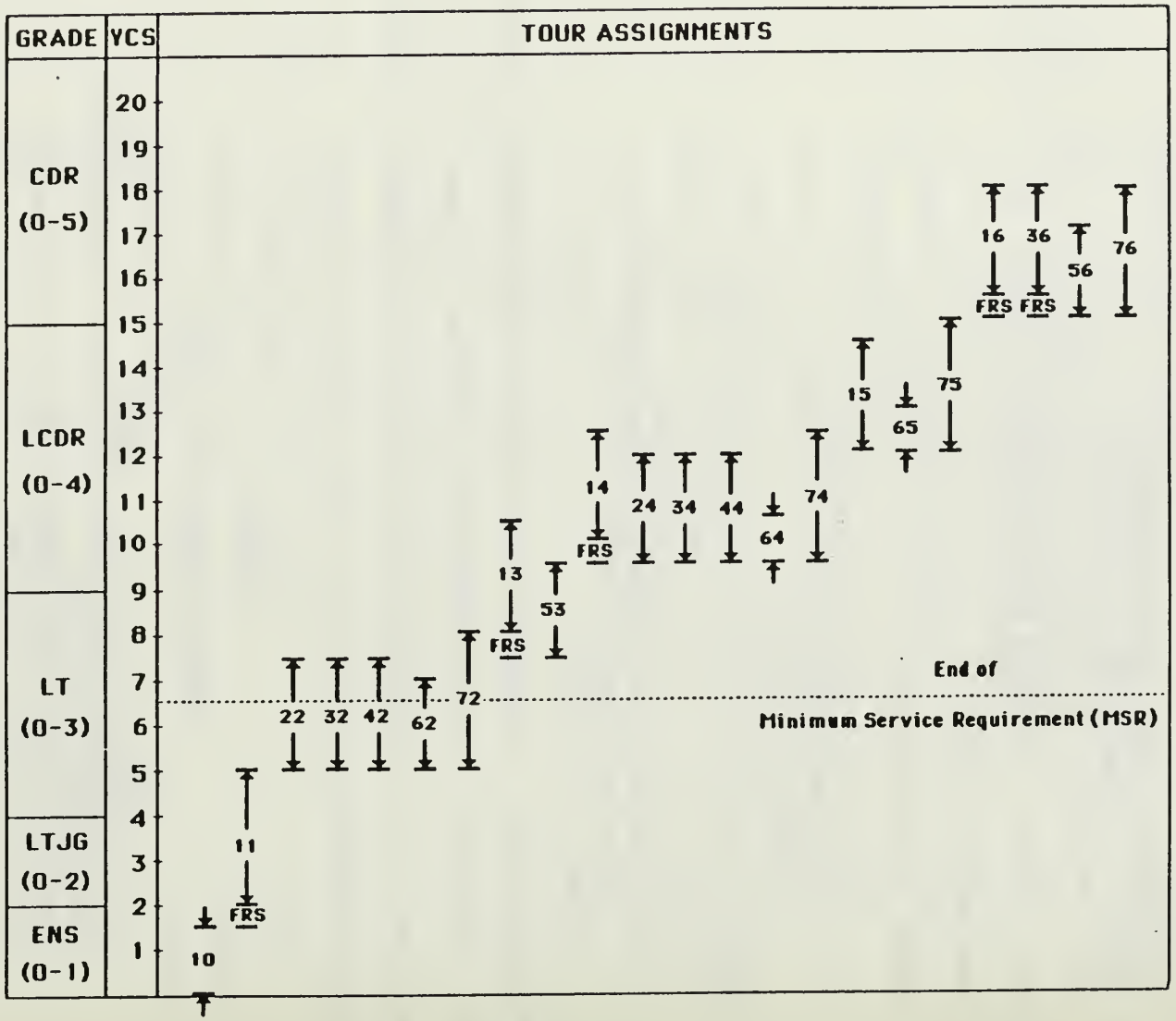


Figure 3.4 Timing of Billet Categories

well known framework of the Aviation Officer Professional Development Path as given in Figure 1.1. Figure 3.4 shows when the various types of assignments occur within an aviation career and their tour lengths. This way, Figure 3.4 illustrates that an FRS assignment on the second tour (tour 22), occurs at the grade level of Lieutenant (03), and is 2½ years in length. This compares to the FRS assignment on the fourth tour (tour 24), that is at the grade of Lieutenant Commander (04), and is also 2½ years in length. As stressed in The Unrestricted Line Officer Guidebook [Ref. 1:p. 38], the order of aviation assignments and specific timing is not universally the same for every pilot and NFO but the successful aviator will have completed most of the steps as depicted in Figure 1.1 at the completion of his career.

Morris [Ref. 13:pp. 51-65] showed by a study of 462 careers in the Maritime Patrol Aviation Community that timing and sequence did play a statistically significant part in Aviation Command Selection. A summary is presented in Table 3.4.

TABLE 3.4

AVIATION ASSIGNMENT SEQUENCE

COMMAND SELECTEES		NON-SELECTEES	
AFLOAT	53	AFLOAT	53
PROFESSIONAL DEVELOPMENT	64	FLEET SQUADRON	14
FLEET SQUADRON	15	PROFESSIONAL DEVELOPMENT	65
AFLOAT	53	AFLOAT	53
FLEET SQUADRON	14	OTHER	74
PROFESSIONAL DEVELOPMENT	65	FLEET SQUADRON	15
PROFESSIONAL DEVELOPMENT	63	OTHER	73
AFLOAT	54	AFLOAT	54
FLEET SQUADRON	15	FLEET SQUADRON	15
FRS	23	AFLOAT	53
FLEET SQUADRON	14	TRAINING COMMAND	34
PROFESSIONAL DEVELOPMENT	65	FLEET SQUADRON	15

The following is a summary of Morris' [Ref. 13:pp. 43-46] most noteworthy statistical results:

PILOTS

1. Service College significantly enhanced command selection opportunity;
2. Postgraduate education may have some positive effect upon selection opportunity;
3. FRS tours seem to improve selection opportunity;
4. Instructor duty at the Naval Academy, NROTC units may prove beneficial to command selection screening;
5. Ship's company sea duty tours may prove detrimental to command selection opportunity;
6. Staff shore duty involving warfare specialty may not be particularly enhancing.

NFOs

1. Service College education significantly improves command selection opportunity;
2. Postgraduate education does not seem to be considerably important;
3. FRS tours are very enhancing;
4. Training command tours have considerably positive influence on command selection opportunity;
5. Ship's company sea duty tours may have a negative effect upon command screen opportunity.

Although no statistical evidence that the above results are valid outside the time frame of Morris' study of the Maritime Patrol Community is given here, this author's experience with at least three squadron ready room debriefings by senior members of Squadron Command Selection Boards essentially affirms the wider applicability of Morris' results. Thus, timing is known to be of paramount importance to the successful career of an aviator. Detailing assignment officers, as well as, Commanding Officers advise their juniors of these tour effects to help develop viable aviation careers.

C. IDENTIFICATION OF THE MAJOR AVIATION CAREER POINTS

The Guidebook, in its concluding paragraph discussing the professional development of Aviation Warfare Officers states, "The universal factor influencing a successful career is that of individual performance. Bear in mind that the better your performance as an aviation officer, the greater the number of career options open to you." [Ref. 1:p. 44] Since there are, generally, only two Fleet Squadron tours prior to Aviation Command Screen, the conclusion may be drawn that these are the major aviation career points in which individuals must excel in order to be selected as a Commanding Officer.

In summary, the major aviation career points are listed for the first twenty years of commissioned service as:

- Fleet Squadron (tour 11). . . Initial operational flying assignment
- Fleet Squadron (tour 14 or 15). . . Department Head assignment
- Fleet Squadron (tour 16). . . Squadron XO/CO
  Training Command (tour 36). . . Squadron XO/CO

It should be noted that all three major career points occur during a fleet squadron assignment. A Lieutenant in the Aviation Community must complete an initial squadron tour and become qualified as either a Mission Commander, Aircraft Commander, and/or Flight/Division Leader. Specifically, a Mission Commander is either an NFO or pilot who has met the requirements to run an aircraft's tactical mission in a multi-position aircraft, e.g. P3C. An aircraft Commander is a pilot-in-command of a single multi-piloted aircraft, e.g. S3A. A Flight Leader is generally thought of as the senior qualified aviator leading a

multi-aircraft formation. A section is two aircraft; two sections form a division of aircraft, whose commander is the Division Leader.

As a Lieutenant Commander, the next and probably the most important tour to the aviator is the Aviation Department Head assignment. This could be either the second or the third fleet squadron tour depending on subcommunity. The department head tour is the last test prior to the Aviation Command Screening Board which selects Commanders who will become Squadron Commanding Officers. Only the best qualified are selected to lead the aviation squadrons in an approximate thirty month tour. This tour is spent first, as squadron executive officer prior to the command change. The second half of the tour is the all important actual Commanding Officer assignment.

D. ACTUAL MOVEMENT PATTERNS

In this section the methodology of O'Conner is adopted to discuss and represent Aviation career patterns for officers through the grade of Commander. Once a Naval aviator reaches the grade of Captain, for all practical purposes, he is lost to aviation due to the shortage of Aviation Captain flying billets. [Ref. 12] Figure 3.5 shows potential career patterns for due course aviation officers who reach aviation command. The most likely tour sequences are listed in Table 3.5.

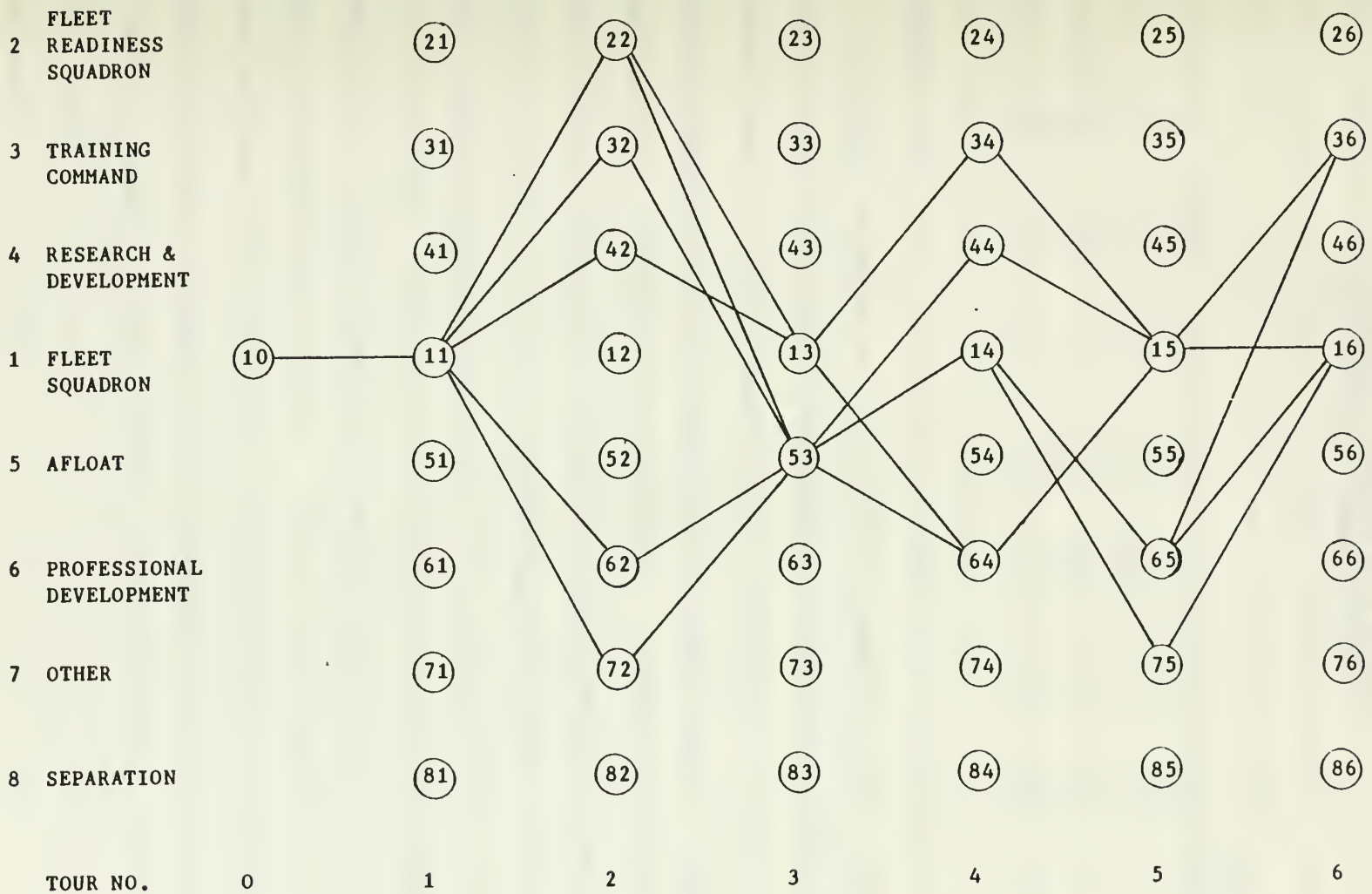


Figure 3.5 Tour Sequence of Successful Aviation Command Selectee

TABLE 3.5

POSSIBLE TOUR SEQUENCE OF SUCCESSFUL AVIATION COMMAND SELECTEE (05)

ASSIGN. SEQ.	TOUR NO. 0	1	2	3	4	5	6
A	10	11	22	53	14	65	16
B	10	11	22	13	34	15	36
C	10	11	62	53	14	75	16
D	10	11	32	53	44	15	16
E	10	11	42	13	64	15	16
F	10	11	72	53	14	65	36
G	10	11	22	53	64	15	16

Minor differences occur among tour sequences for the various warfare specialties (AQD) discussed in Table 2.1. For example, fighter pilots typically have a much greater opportunity to get a second fleet squadron tour (tour 13) as a Lieutenant, in addition to the third fleet squadron tour, department head (tour 15). This is not normally the case for most other pilot subcommunities. Another difference would be in the Maritime Patrol community where both pilots and NFOs enjoy a greater opportunity of a shorter shore tour immediately prior to (tour 73) and/or immediately after (tour 65), the department head assignment (tour 14). This would occur prior to the XO/CO tour (tour 16). This shorter tour would typically be in a professional development assignment, i.e., a one year service college tour (tour 65). Another distinct possibility is the assignment to a community wing staff (tour 75) in the immediate area "homesteading" after notification of XO/CO selection. Often there may be as long as a year after command selection before a vacancy in the XO billet occurs.

Assignment Sequence A from Table 3.5 is a successful aviation career path during which the officer completes the initial fleet squadron tour (tour 11) and then reports to the Fleet Readiness Squadron (tour 22), from there the officer moves on to an Afloat Ship's Company (tour 53), and then to the Fleet Squadron Aviation Department Head assignment (tour 14). After the Department Head assignment (tour 14) is completed, assignment is made to the Naval War College junior course (tour 65). This course occurs just prior to Aviation Command screening, after which this officer rotates to the Fleet Squadron (tour 16) as the Commanding Officer.

Assignment Sequence B differs from Sequence A at the third tour where the officer is assigned to a second Fleet Squadron (non-Department Head) (tour 13). From there the officer is assigned to the Aviation Training Command as a junior Lieutenant Commander (tour 34). The fifth tour is once again at the Fleet Squadron but as a Department Head (tour 15). Command screening was successful during this career and the XO/CO tour is spent in the Aviation Training Command (tour 36). This type of tour sequence would be desirous from the individual's point of view, but might be career limiting past the XO/CO tour (tour 36) because no broadening or subspecialty development was accomplished, i.e., all tours were in a cockpit.

Assignment Sequence C has the officer going to postgraduate education (tour 62) after the first squadron (tour 11). Immediately after PG school, an afloat ship's company tour (tour 53) usually occurs. Most aviation officers will fight to return to the cockpit after two successive out-of-cockpit tours. The case for this is usually

compelling, hence (tour 14), even though a validated education billet is required. Depending on time prior to Aviation Command screening, a shortened validated education assignment (tour 75) is done. The XO/CO assignment is next in this sequence (tour 16).

Tour Sequence D has the officer rotating from the Fleet Squadron (tour 11) to the Aviation Training Command (tour 32). As with the majority of careers the next assignment after completion of any initial shore duty is to an afloat ship's company (tour 53). The second shore assignment is to a Research and Development squadron, VX-1 (tour 44), which is followed by a Fleet Squadron Department Head billet (tour 15). This Fleet Squadron (tour 15) precedes the XO/CO (tour 16).

Tour Sequence E has the aviation officer rotating ashore from an initial Fleet Squadron (tour 11) to a Research and Development Squadron (tour 42). Both FRS and R & D billets are few in numbers and reserved for the top performers. The next assignment in this sequence is a second Fleet Squadron non-Department Head (tour 13). Postgraduate education at the Lieutenant Commander level is the next assignment (tour 64), followed by both Fleet Squadron Department Head (tour 15) and Fleet Squadron XO/CO tour (tour 16).

During tour Sequence F the aviation officer leaves the Fleet Squadron (tour 11) to go to an overseas Staff billet (tour 72). The next assignment is the Afloat Ship's Company (tour 53) and completing two successive out-of-cockpit assignments, the Fleet Squadron Department Head (tour 14) follows. After this early department head assignment is over, a professional broadening tour at the Naval War College is

completed (tour 65) just prior to the XO/CO assignment (tour 36) in the Aviation Training Command.

Tour Sequence G is the same as Sequence A until the fourth tour when Postgraduate education (tour 64) occurs instead of an early Fleet Squadron Department Head (tour 14). The Fleet Squadron assignment (tour 15), however, follows PG school prior to the XO/CO (tour 16).

Figure 3.6 depicts career pathways of officers who retire as Commanders and are not Aviation Command Selectees. Refer to Table 3.6 to further explain Figure 3.6.

TABLE 3.6

POSSIBLE TOUR SEQUENCE OF AVIATOR (05) NON-COMMAND SELECTEE; RETIRES AS 05

	TOUR NO.						
	0	1	2	3	4	5	6
ASSIGN. SEQ.							
H	10	11	62	53	14	65	76
J	10	11	22	13	34	75	56
K	10	11	32	53	74	15	36
L	10	11	42	73	54	15	76
M	10	11	72	53	34	15	66

Tour Sequence H is the same as Sequence C, discussed previously, until the fifth tour when assignment is made to the Naval War College (tour 65). In this sequence the officer is selected to the grade of Commander but fails to select as a potential aviation Commanding Officer and is assigned a shore staff billet (tour 76).

Tour Sequence J is the same as Sequence B until the fifth assignment which is a shore staff billet (tour 75). As this officer selects for the grade of Commander only, an afloat tour is next (tour 56).

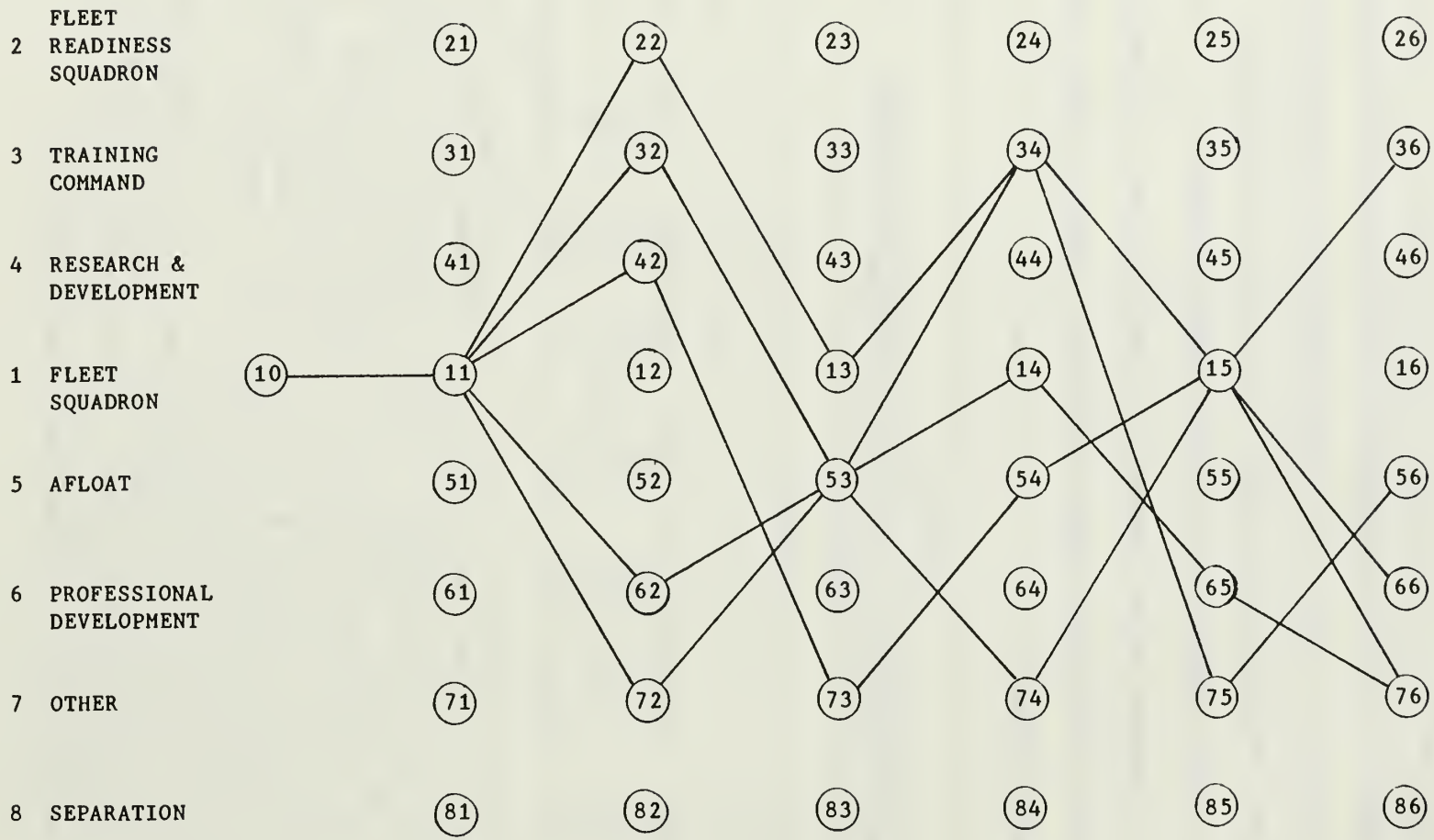


Figure 3.6 Tour Sequence of Non-Command Selectee Commander

Tour Sequence K is similar to Sequence D through the third tour. After the afloat assignment (tour 53), a shore staff billet is the next billet (tour 74). This is followed by the Fleet Squadron Department Head assignment (tour 15). As this Commander fails to select for XO/CO, the detailer sends this officer to the Aviation Training Command (tour 36) for staff duty at one of the wings.

During Tour Sequence L, the aviation officer rotates from an R & D Squadron (tour 42), where he earned a subspecialty coding in Weapons Systems Acquisition Management (WSAM), to a WSAM billet at the Systems' Command Headquarters in Washington, D.C. (tour 73). After two successive shore tours, the next assignment in the sequence is to an afloat unit (tour 54). The Fleet Squadron Department Head (tour 15) follows the ship's company assignment. As this Commander failed to Command select, assignment again is made in his subspecialty area (tour 76).

Tour Sequence M is the same as Sequence F until the fourth tour with assignment to the Aviation Training Command (tour 34). Sea duty is next in sequence with the return to a Fleet Squadron for Department Head duties (tour 15). A few of these non-XO/CO aviation officers are selected for postgraduate education at the Commander level (tour 66).

Figure 3.7 depicts career paths of non-due course Lieutenant Commanders, passed over for Commander who retire from the Service at that point. Refer to Table 3.7 to follow the career pathway flow shown in Figure 3.7.

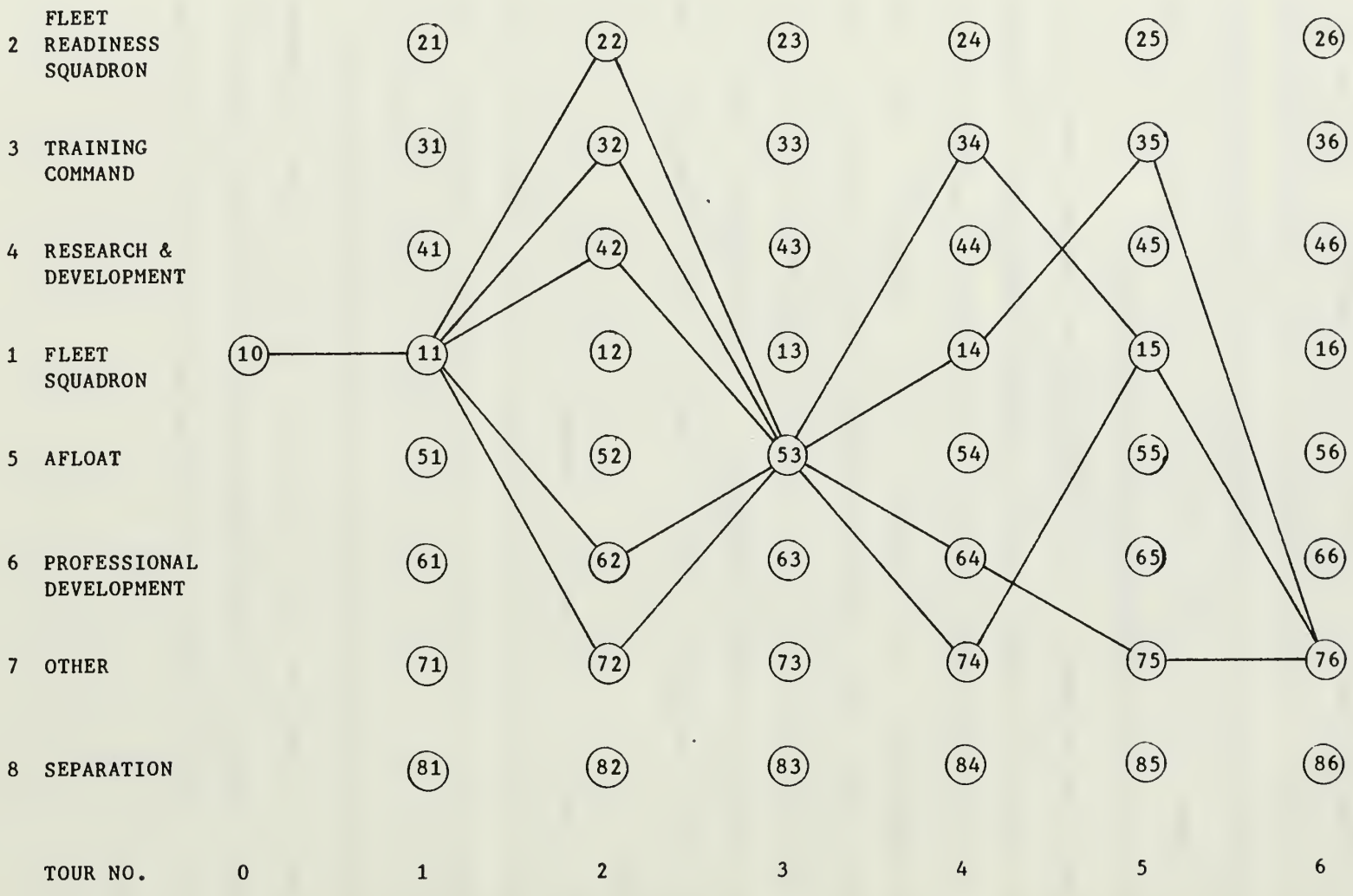


Figure 3.7 Tour Sequence of Lieutenant Commander Retiree

TABLE 3.7

POSSIBLE TOUR SEQUENCE OF AVIATOR (04)
NON-DUE COURSE; RETIRES AS 04

ASSIGN. SEQ.	TOUR NO. 0	1	2	3	4	5	6
N	10	11	72	53	14	35	76
P	10	11	62	53	74	15	76
Q	10	11	42	53	34	15	76
R	10	11	32	53	64	75	76
S	10	11	22	53	14	35	76

Assignment Sequence N is the same as Sequence F until this officer fails to select for Commander. At that point, his orders are to the Aviation Training Command Staff (tour 35) followed by a tour at a Naval Air Station (tour 76).

Assignment Sequence P follows that of Sequence C until after the afloat ship's company billet (tour 53). The next assignment is to a validated PG school billet for the required payback within two assignments (tour 74). This officer failed to select during his fifth tour in the Fleet Squadron (tour 15). The next assignment in this sequence, prior to retirement, is to a shore staff (tour 76).

Assignment Sequence Q career path has the officer going from an R & D Squadron (tour 42) to an Afloat Unit (tour 53). From there, the officer's career takes him to the Training Command (tour 34), and then to the Fleet Squadron (tour 15). As this officer fails to select for Commander, he elects to retire after 20 years. His last assignment is Washington, D.C. (tour 76).

Assignment Sequence R follows the same route as Sequence D up through the third tour. The fourth tour is a postgraduate education

assignment (tour 64) followed by an immediate validated PG billet ashore (tour 75). As this officer fails to select for Commander, he rotates to another shore assignment (tour 76) until retirement at the twenty year point.

Assignment Sequence S follows the exact sequence found in A through tour four. For his fifth tour, the officer is ordered to the Aviation Training Command (tour 35) where failure to select for Commander is reason for a follow on assignment, again ashore at a naval air station (tour 76). Retirement is at the twenty year point in this career path.

Figure 3.8 depicts career paths of non-due course Lieutenants passed over for Lieutenant Commander who separate from the Service at that time. Refer to Table 3.8 to follow the flow pattern.

TABLE 3.8

POSSIBLE TOUR SEQUENCE OF LIEUTENANT AVIATOR (03)
NON-DUE COURSE, SEPARATES FROM SERVICE

	TOUR NO.						
	0	1	2	3	4	5	6
ASSIGN. SEQ.							
T	10	11	32	53	84		
U	10	11	72	33	84		

Assignment Sequence T follows the same career path that Sequence D did through the third assignment (tour 53). However, at this point this officer's performance has left something to be desired and therefore, he fails to select for Lieutenant Commander. It is at this point that the career is terminated by separation (tour 84).

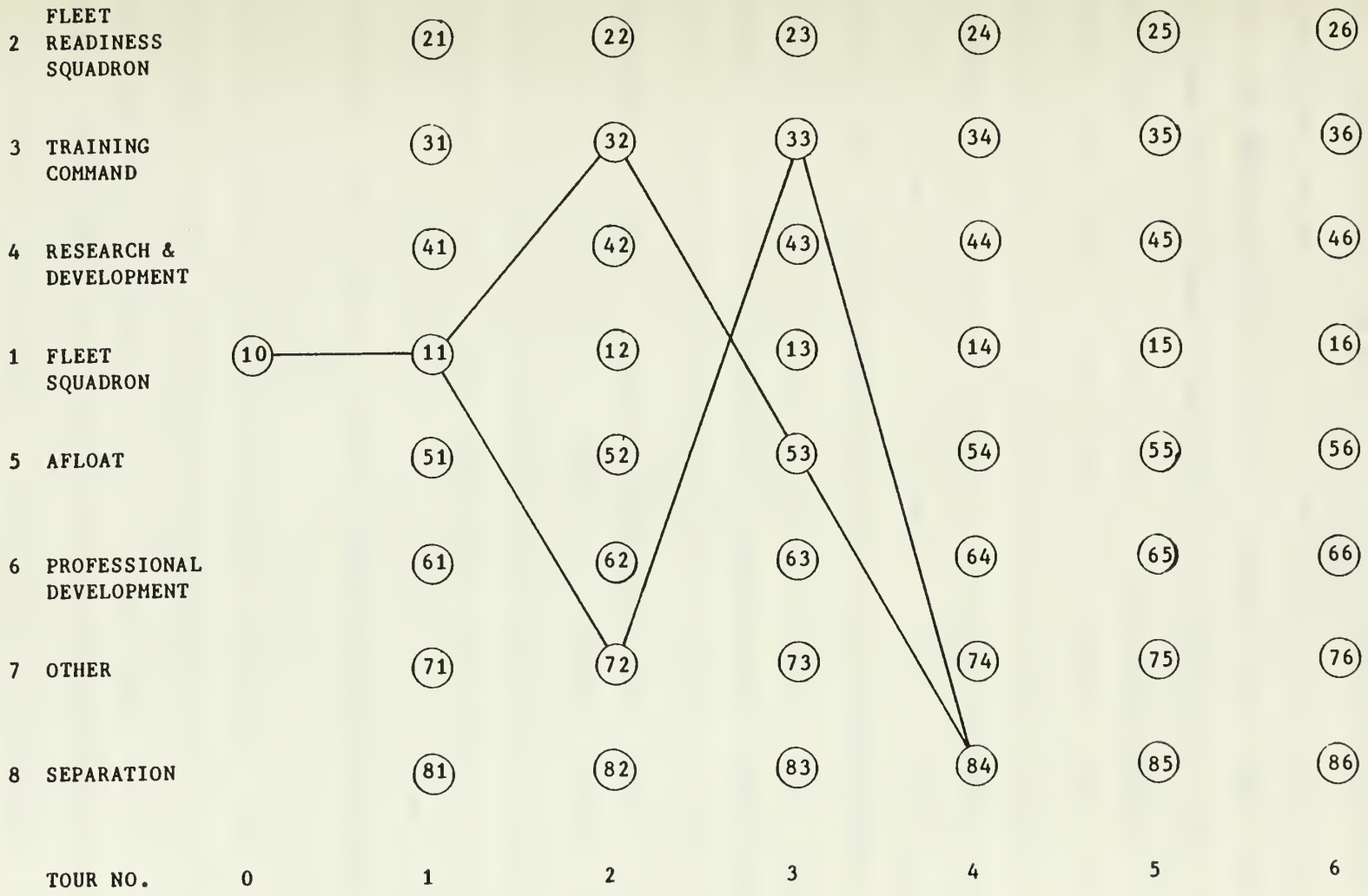


Figure 3.8 Tour Sequence of Lieutenant Aviator Separatee

In assignment Sequence U the career path after the Fleet Squadron (tour 11) has the officer assigned to a naval air station (tour 72) and then returning to the Training Command (tour 33). Because performance has been less than successful, this career is finished when the officer is passed over for Lieutenant Commander and separates (tour 84) from the Navy.

IV. PCS COSTS

A. NAVY WIDE PCS COSTS

The Problem Statement in Chapter I, Section C, discussed the efficiency of officer career paths with respect to PCS moves. For the fiscal years 1984 and 1985, Congress has failed to grant the entire amount of funds requested by the Navy for planned movement of its personnel. This shortfall has caused the Navy's manpower planners to think of new ways of reducing PCS amounts. Funding reductions, however, do not always bring about more efficient ways of doing business. Often, these cuts are imposed across the board on every line item, e.g., a one percent reduction in "Training PCS" expenses may be ordered across the board. This one percent reduction may allow the Navy to remain within a specified ceiling in the PCS budget but might prove to be very inefficient because of its effect on individual service members' careers. Reduction of "Training PCS" would, of course, bring down total expenditures, but it would also reduce the effectiveness of new trainees in the unit where they are reporting. A prospective Aviation Department Head enroute to become a Squadron Maintenance Officer would be much more effective in the billet at the start if he had attended the eight week course the Navy has developed in this area. Many squadron maintenance officers do not get the opportunity of this training and must learn the job by doing it. Cost effectiveness, in this example does not necessarily lead to increased effectiveness in job performance.

The total FY84 PCS Travel account authorized by Congress for the entire Navy was $ 566,646,000.00 [Ref. 17:p. 170]. Appendix A shows the

breakdown for the Navy of the six different types of PCS moves for fiscal years 1980 through 1984. The move types, defined in Table 1.1, are accession, separation, operational, training, unit, and rotational moves. Appendix A lists the numbers of moves by category as well as, the total funds spent in each category. To the right of each category amount is in parentheses the percentage of the total for the fiscal year that applies for that category. For example, in fiscal year 1980, 43,200 operational moves were made by Navy personnel which represented fourteen percent of the total number of moves made that year in the entire Navy. Similarly, $ 76,300,000.00 was spent on Navy operational moves in fiscal year 1980 which represented twenty percent of all PCS costs for that year. [Ref. 18:pp. 40-45]. The second and third pages of Appendix A present the data found on the initial page of this appendix in graphic format.

Appendix B is a listing of PCS entitlements that an individual in the Services may claim when moving from one tour of duty to the next [Ref. 4]. Appendix C breaks down the major entitlements further into percentages of the total Navy budget [Ref. 18:p. 49].

B. PCS POLICY INFLUENCES NUMBER OF MOVES

As the Department of Defense PCS Study [Ref. 19:p. 4] points out, total DOD accession and separation moves are <u>not</u> influenced by tour length and assignment policies, but rather by the rate of population turnover. Policy and tour length changes do influence the number of rotational and operational moves, however. Three factors tend to drive the numbers of these types of moves:

1. The number of tours with fixed assignment length.
2. Length of fixed tours and maximum length of variable tours.
3. Staffing policies.

Fixed tour lengths drive the numbers of operational and rotational moves for the reason that individuals must move after a specified period of time. The length of fixed tours and the maximum length of variable tours influence the rate at which personnel are "turned over" in their units. Staffing policies, such as permissible tour sequences, homesteading strategies, and voluntary extensions can also influence the number of operational and rotational moves. [Ref. 19:p. 4]

The number of PCS moves is sometimes compared to total Naval end strength, creating the impression that more than half of the total Naval population moves every year. For example, when the approximate 323,200 moves for the entire Navyin FY84, shown in Appendix A, are compared to the FY84 approximate end strength of 564,800 [Ref. 17:p. 155] it would appear that 57 percent of the population was required to move that year. However, this does not consider the extent to which both strength level and number of moves are affected by accessions and separations. A more accurate picture is gained by comparing the number of moves during a year, exclusive of accession and separation moves, to the number of people on board for that year. Using this approach, only 22 percent of the Navy population moved in FY84. Figure 4.1 is a graph using this approach of excluding accessions and separations to show the percentage of people moving within each of the Armed Services over the fiscal years 1980-84 [Ref. 18:p. 15].

At this point it is necessary to introduce the term, "manageable" PCS. Manageable PCS is defined here as operational, rotational, and

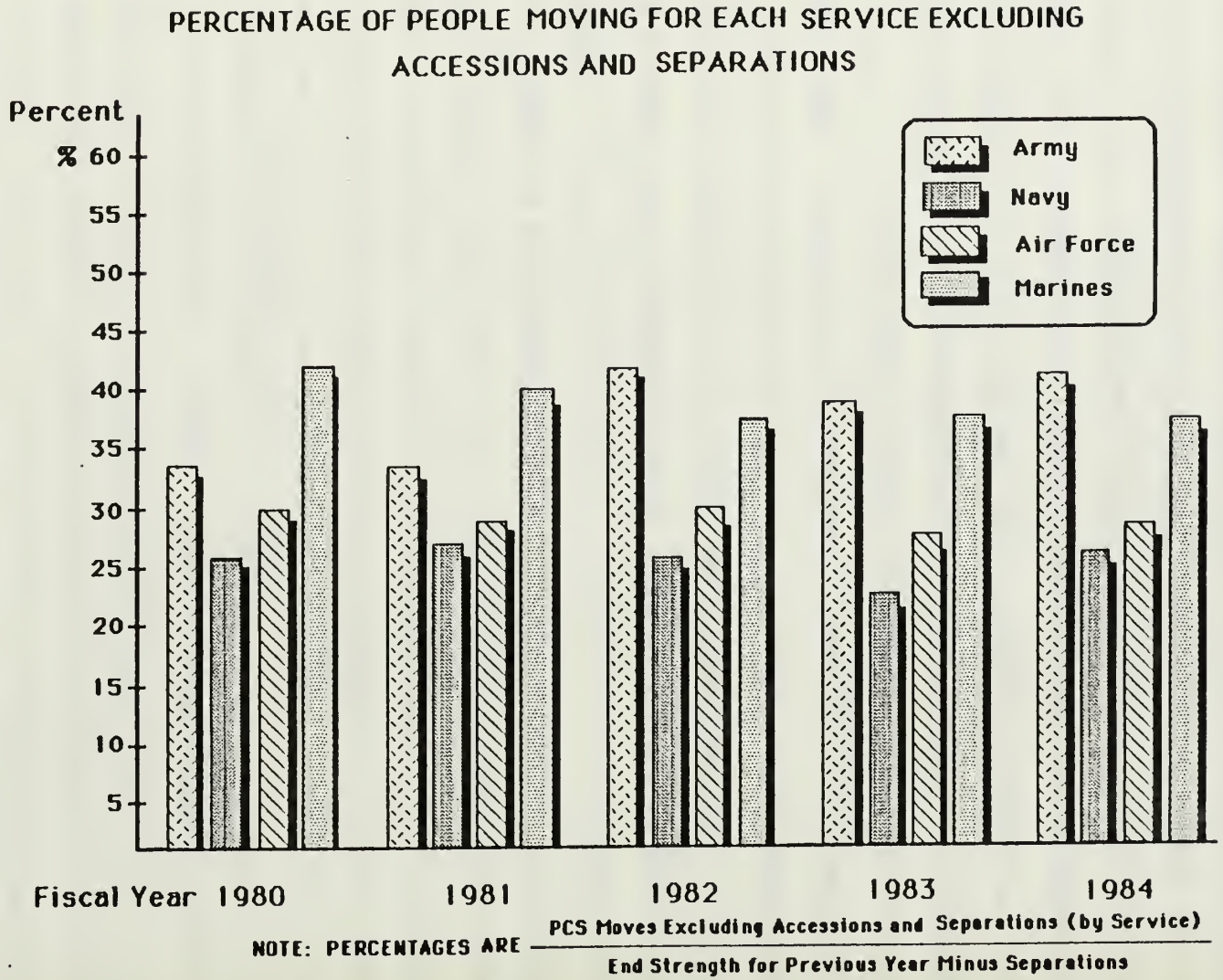


Figure 4.1 Percentage of People Moving for Each Service (Excluding Accessions and Separations)

training PCS moves because assignment policies have a direct effect on both the total dollars expended, and total number of moves in each of these three categories. The detailing officers manage these three categories, which made up only thirty-five percent of the total number of moves, but sixty-four percent of the costs in fiscal year 1984 as shown in Appendix A.

C. AVIATION COMMUNITY PCS

Dollar costs the past five fiscal years have been obtained from NMPC-46 for aviation officer PCS movements through the grade of Commander. Table 4.1 shows the breakdown of these costs for the three manageable types of PCS moves in the Aviation Community. All three categories have increased significantly in fiscal year 1984 over previous years shown. For example, the FY84 Aviation Operational PCS amount spent represents a twenty-four percent increase over the amount in this category in FY83. Aviation Rotational PCS dollars spent in FY84 are up thirty-five percent and Aviation Training dollars expended have increased by twenty-eight percent in one year.

TABLE 4.1

COST OF AVIATION PCS THRU THE GRADE 05 ($000)

TYPE	FY80	FY81	FY82	FY83	FY84
OPERATIONAL	5160	8321	7800	6452	8039
ROTATIONAL	8476	11595	10678	8343	11283
TRAINING	3878	5180	5377	5478	6992
TOTALS	$17514	$25096	$23855	$20273	$26314

Comparing the Navy-wide PCS cost, $ 566,646,000.00 to the Navy Aviation Officer dollar amounts supplied in Table 4.1 for FY84, it is seen that the operational, rotational, and training PCS cost of $ 26,314,000.00 in the Aviation Community is only 4.6 percent of the total Navy PCS budget for that year. This 4.6 percent of the total Navy PCS budget represents the amount that could be influenced by changes in length of Aviation Officer assignment tours.

PCS movement trends in the Aviation Officer Community can be seen from the fiscal year data presented in Tables 4.2 and 4.3. The figures in these tables are divided into Operational Moves (OP), Rotational Moves (ROT), and Training Moves (TRA), and show both cost moves and no-cost moves. A no-cost move is defined as a move to a subsequent tour in the same geographic area with little or no cost to to the Navy. No-cost moves are not included in the number of PCS moves reported to Congress. Therefore, the degree of Aviation Officer turbulence is understated. This turbulence will be discussed in Section D of this chapter. Table 4.4 is a summation of Table 4.2 and 4.3. These data were supplied by NMPC-46.

TABLE 4.2

NUMBER OF AVIATION COST MOVES THRU GRADE 05

TYPE	FY80	FY81	FY82	FY83	FY84
OPERATIONAL	1652	2136	1959	1606	1901
ROTATIONAL	903	1100	1027	938	1312
TRAINING	1353	1513	1654	1504	1919
SUBTOTAL	3908	4749	4640	4048	5132

TABLE 4.3

NUMBER OF AVIATION NO-COST MOVES THRU GRADE 05

TYPE	FY80	FY81	FY82	FY83	FY84
OPERATIONAL	917	824	947	699	666
ROTATIONAL	4	2	4	3	9
TRAINING	132	135	143	265	566
SUBTOTAL	1053	961	1094	967	1241

TABLE 4.4

TOTAL NUMBER OF AVIATION COST & NO-COST MOVES THRU GRADE 05

TYPE	FY80	FY81	FY82	FY83	FY84
OPERATIONAL	2569	2960	2906	2305	2567
ROTATIONAL	907	1102	1031	941	1321
TRAINING	1485	1648	1797	1769	2485
TOTAL	4961	5710	5734	5015	6373

Section B of this chapter pointed out that only twenty-two percent of the entire Navy population moved in fiscal year 1984 (excluding accessions and separations). From Table 4.4, the total number of aviation officer cost and no-cost transfers in fiscal year 1984 was 6373, representing forty-four percent of the Aviation Community end strength of 14447 officers (see Table 2.3). The rate of forty-four percent of aviation PCS movement in 1984 is double the rate of twenty-two percent found in Section B for the entire Navy that same year. This forty-four percent of Aviation PCS moves in 1984 also represents a significant increase in aviation movement over the FY83 rate of thirty-five percent. The suspected reason for this increase is that aviation officer tour lengths have considerably shortened over the past two years. Therefore, the next section will discuss recent trends in aviation tour lengths.

D. TOUR LENGTHS AND PCS TURBULENCE

In response to a Newsweek Magazine questionnaire for a Summer 1985 article on officer careers, OP-01G reviewed the assignment lengths of all Naval Officers and measured the difference between assignment reporting dates and projected rotation dates. The average frequency of transfers for officers from command to command by grade is shown in Table 4.5 for all mid-grade officers in the Navy.

TABLE 4.5

NAVY OFFICER FREQUENCY OF TRANSFER

GRADE	FREQUENCY OF TRANSFER IN MONTHS
LT	28.3
LCDR	30.1
CDR	31.3

OP-130 personnel have developed a Time-on-Station measurement capability for the Aviation Community in response to the research question, "How long are Aviation Community tours by officer grade and fiscal year?" The data base included all aviation officers conducting a permanent Change-of-Station move during the three fiscal years studied. This Time-on-Station statistic measured the actual tour length averages of the five aviation subcommunities discussed in Chapter II, Section A. As this Time-on-Station average decreases, an increase in officer turbulence occurrs. Turbulence is the unwanted side effect of personnel movement between assignments, and is caused by the newly reporting officer being less efficient than the outgoing officer.

The tour length averages for all Naval officers in Table 4.5 are considerably longer in comparison to those found in Table 4.6 for the Aviation Officer Community. Column Delta 1, in Table 4.6, is the net change in average aviation tour length from fiscal year 1983 to 1984. Column Delta 2, in Table 4.6, is the net change in the average aviation tour length from FY82 to FY84. In the fifteen different categories by officer grade and subcommunities listed in Table 4.6, twelve tour averages decreased from FY83 to FY84, only two tour averages increased in length, and one remained the same. Column Delta 2, shows that the tour lengths decrerased from FY82 to FY84 in eleven cases, two tour averages remained the same, and only one tour average increased.

This increased aviation officer PCS movement is in direct conflict with the mood of Congress. The reduction of all Federal Government expenditures will be required if the country's budget deficits are to be reduced.

TABLE 4.6

AVIATION SUBCOMMUNITY TOUR LENGTH AVERAGE (MOS)

GRADE	FY82	FY83	FY84	DELTA 1 *	DELTA 2 **
			JET PILOT		
LT	30	27	26	-1	-4
LCDR	27	28	26	-2	-1
CDR	26	24	25	+1	-1
			JET NFO		
LT	35	33	29	-4	-6
LCDR	29	27	25	-2	-4
CDR	27	27	26	-1	-1
			PROP PILOT		
LT	30	30	30	0	0
LCDR	29	27	26	-1	-3
CDR	25	27	25	-2	0
			PROP NFO		
LT	33	32	31	-1	-2
LCDR	29	28	25	-3	-4
CDR	27	25	28	+3	+1
			HELO PILOT		
LT	26	27	26	-1	0
LCDR	29	28	24	-4	-5
CDR	27	25	24	-1	-3

* DELTA 1 = Net change in average aviation tour length from FY83 to FY84

** DELTA 2 = Net change in average aviation tour length from FY82 to FY84

V. AVIATION OFFICER REQUIREMENTS SIMULATION MODEL

Various ideas from the Aviation Officer Requirements Model [Ref. 12] have been discussed throughout this thesis. The Model was developed to test the implications of various policy alternatives in determining total Aviation Officer Requirements. After obtaining the Navy owned software and minimal hands on training in this Model's operation, using a Wang VS-100 minicomputer at the Pacific Training Command headquarters in San Diego for thirty computer hours, fifty-four computer simulations were obtained. As pointed out in Chapter IV, aviation officer movement between assignments has increased, causing the average length of aviation tours to become shorter. The above model was utilized to determine if it could predict optimal Fleet Squadron tour lengths for tours 13, 14, and 15 (defined in Section A of Chapter III), and still meet all the aviation officer requirements by varying pilot and NFO retention rates. Results are summarized in Table 5.1. An example of model output is provided in Appendix D. It is beyond the scope of this thesis to attempt to describe the Aviation Officer Requirements Model or operator input data. Both are adequately explained, however in references 12 and 14.

A. SIMULATION MODEL RESULTS

In order to obtain the results displayed in Table 5.1, the Pilot and NFO retention rates were varied against the length of the Fleet Squadron Tours (tours 13, 14, and 15). Several Aviation Officer Requirements Model "Multiple Aviation Community" computer simulation runs, much like

the example found in Appendix D, were conducted changing the lengths of tours 13, 14, and 15 from twenty-four months to twenty-seven, thirty, thirty-three, and thirty-six months.

The number of PCS moves obtained on the last two pages of Appendix D titled, "Multiple Run Summary, Naval Aviators" and "Naval Flight Officers", is given in row F of Table 5.1 under the column labeled "30 month". In this case, the Model has determined that with a thirty month Fleet Squadron Tour length (for tours 13, 14, and 15) with Pilot retention at sixty percent and NFO retention at seventy-four percent, 10,674 pilots and 5083 NFOs will be required. The total number of PCS moves, for both pilots and NFOs, was determined to be 6716. It should be pointed out here that this Model was developed to determine the numbers of aviation officers required to meet the Navy's needs. The numbers of PCS moves that the Requirement's Model determined was not an original goal and, therefore, it is somewhat cumbersome to use this model to figure out the number of PCS moves.

B. RETENTION RATES VERUS FLEET SQUADRON TOUR LENGTHS

As expected when the Fleet tour length remains constant, say at twenty-four months, and retention for Pilots or NFOs is increased, the number of PCS moves decreases. However, moving across the rows, i.e., changing the tour lengths and keeping the same retention rates, the results are initially surprising. It was originally expected that as tour lengths increased, the number of PCS moves would decrease. This is indeed true when retention figures are low (Pilot 30%/NFO 60% and Pilot 40%/NFO 60%). However, at a pilot retention rate of 45 percent and NFO

TABLE 5.1

AVIATION OFFICER REQUIREMENTS/NUMBER OF PCS MOVES PREDICTED
AS FLEET SQUADRON TOURS 13, 14, 15 LENGTH IS CHANGED
(13 CARRIER AVIATION WINGS)

ROW	GROUP	RETENTION	24 MONTH	27 MONTH	30 MONTH	33 MONTH	36 MONTH
	PILOT	30%	16114	15695	13490	12476	11706
	NFO	60%	4581	4476	4642	4832	4836
	TOTAL REQ	N/A	20695	20171	18132	17308	16542
A	PCS MOVES	N/A	10139	9841	8653	8161	7659
	PILOT	40%	16498	13362	11885	10995	11040
	NFO	60%	4581	4476	4642	4832	4836
	TOTAL REQ	N/A	21079	17838	16527	15827	15876
B	PCS MOVES	N/A	10003	8278	7490	7102	7078
	PILOT	45%	13654	12822	10954	10867	10995
	NFO	65%	4521	4590	4709	5003	5175
	TOTAL REQ	N/A	18175	17412	15663	15870	16170
C	PCS MOVES	N/A	8338	7880	6919	6999	7136
	PILOT	50%	13327	11828	10814	10746	10846
	NFO	70%	4628	4733	4983	5176	5278
	TOTAL REQ	N/A	17955	16561	15797	15922	16124
D	PCS MOVES	N/A	8100	7293	6897	6932	6999
	PILOT	55%	12732	11819	10750	10809	10915
	NFO	72%	4634	4811	5045	5221	5321
	TOTAL REQ	N/A	17366	16630	15795	16030	16236
E	PCS MOVES	N/A	7667	7244	6802	6904	6981
	PILOT	60%	12198	10973	10674	10930	10931
	NFO	74%	4674	4905	5083	5254	5298
	TOTAL REQ	N/A	16872	15878	15757	16184	16229
F	PCS MOVES	N/A	7342	6786	6716	6914	6916

retention rate of sixty-five percent, as seen in the row labeled C in Table 5.1, the number of PCS moves first decreases, then increases with increasing tour length. This type of behavior is repeated at retention rates of Pilot 50%/NFO 70%, shown in row D of Table 5.1; Pilot 55%/NFO 72%, in row E; and finally Pilot 60%/NFO 74%, in row F.

These results can be explained as follows. The model will always meet all aviation requirements in the order of the numbering system developed in Figure 3.1 for assignment types. Requirements are first met in the Fleet Squadrons (assignment type number one), followed by meeting all requirements in the Fleet Readiness Squadrons (assignment type number two). This same process is continued in meeting the remaining aviation officer requirements in numerical order of assignment type. Given a surplus of aviation officers in a particular grade, the model increases upward detailing up to the default value set at twenty percent of the total number of officers in the specific grade available for assignment for these computer simulations. For example, if a shortage of Lieutenant Commanders exists in an Aviation Subcommunity, Lieutenants would be detailed into Lieutenant Commander billets up to the default value. The default values can be changed by operator input. The model also ensures that at least three Lieutenant Commanders are available to each aviation squadron to fill three of the four Aviation Squadron Department Head billets. The fourth Department Head billet is thus available for upward detailing. As retention rates are increased, all aviation officer requirements are met and more aviation officers are available for what the model calls "out of aviation flow" which would tend to increase the total number of PCS moves. When retention rates

are low, as in rows A and B of Table 5.1, the advantages of increasing tour lengths are apparent in the reulting lower number of PCS moves. However, at higher retention rates as in rows C, D, E, and F, the benefits of increasing tour lengths wear out. After a point, all aviation requirements are met and the surplus of aviators is used to fill 1000/1050 billet requirements called "out of aviation movement" by the model, which again increases the number of PCS moves. This "out of aviation movement" is to billets designated 1000 (meaning billets to be filled by any Unrestricted Line Officer) and 1050 (meaning billets to be filled by any Warfare Specialty Officer). The model will also look for requirements that meet the best fit, meaning a PCS move will be generated up to three months early, and also three months late, and not necessarily at the specified tour length. This could increase or decrease total PCS move numbers presented in Table 5.1.

C. MODEL APPLICATION

Table 5.2 shows both Pilot and NFO retention rate data obtained from the officer bimonthly newsletter, Perspective, July/August, 1984 for the past five fiscal years. The fiscal year 1979 retention rates of thirty-one percent for pilots and sixty percent for NFOs, compare closely to the retention rates in row A, of Table 5.1. Here, the optimal tour length for tours 13, 14, and 15 resulting in minimal number of PCS moves was found to be thirty-six months. In FY81, Pilot retention rate was forty-two percent and NFO retention was sixty-five percent. This best compares with retention rates in row C, of Table 5. 1 where the optimal tour length (giving the smallest number of

PCS moves) was determined to be thirty months. In FY82, the retention rates were forty-nine and seventy-three percent for pilots and NFOs, respectively, comparing closely with the retention rates in row D in Table 5.1, indicating a thirty month optimal tour length for tours 13, 14, and 15. The FY83 retention rate was fifty-eight percent for pilots and seventy-four percent for NFOs, comparing closely with the simulation data presented, in row F, in Table 5.1. Here a thirty month optimal tour length was determined as giving the least number of PCS moves.

TABLE 5.2

AVIATION OFFICER RETENTION RATES IN PERCENTAGE AND OPTIMAL TOUR LENGTHS

	FY79	FY80	FY81	FY82	FY83	FY84(Proj)
PILOT	31	30	42	49	58	60
NFO	60	71	65	73	74	80
OPTIMAL TOUR LENGTHS IN MONTHS	36		30	30	30	30

When this modeling result is compared to the actual Aviation tour length data of Table 4.6, it appears that the Navy may not be optimizing tour lengths in the Aviation Officer Community in order to achieve lower PCS costs.

VI. RECOMMENDATIONS FOR REDUCED PCS MOVEMENT

A. INITIAL FLEET SQUADRON TOUR AND AVIATION MINIMUM SERVICE REQUIREMENT

As discussed in Chapter I, Section A, the typical aviation officer completes initial flight training in one and one-half years, and at that point incurs an obligated service time of five years. Training continues at a Fleet Readiness Squadron for an additional six months, during which time, the obligated service requirement for the aviator has been reduced, to a total of 4½ years remaining. Prior to 1979, obligated service was shorter and coincided fairly closely with the end of the thirty-six month First Fleet Squadron assignment (tour 11). When the Navy increased the obligated service requirement to five years, the Fleet Squadron assignment remained the same in length and aviators now complete this tour with eighteen months remaining in their service obligation. Therefore, the Navy now reassigns all the Lieutenant aviators completing tour 11, to a shore tour. As shown in Figure 2.1, the aviator officer retention rate is measured two years after the Minimum Service Requirement (MSR) time, i.e., at the 6½ years of commissioned service point.

Figure 2.1 illustrated an example of fifty percent retention with an original cohort of 1000. At the MSR point, 930 aviators are in the service, whereas, at the MSR + 2 point in time, where retention is measured, only 480 aviators remain. Figure 6.1 is carried over from Figure 2.1 with the same numeric assumptions, but Figure 6.1 is illustrated slightly differently, however. The Flight Training tour (tour 10) is shown in this example and begins on the horizontal axis at

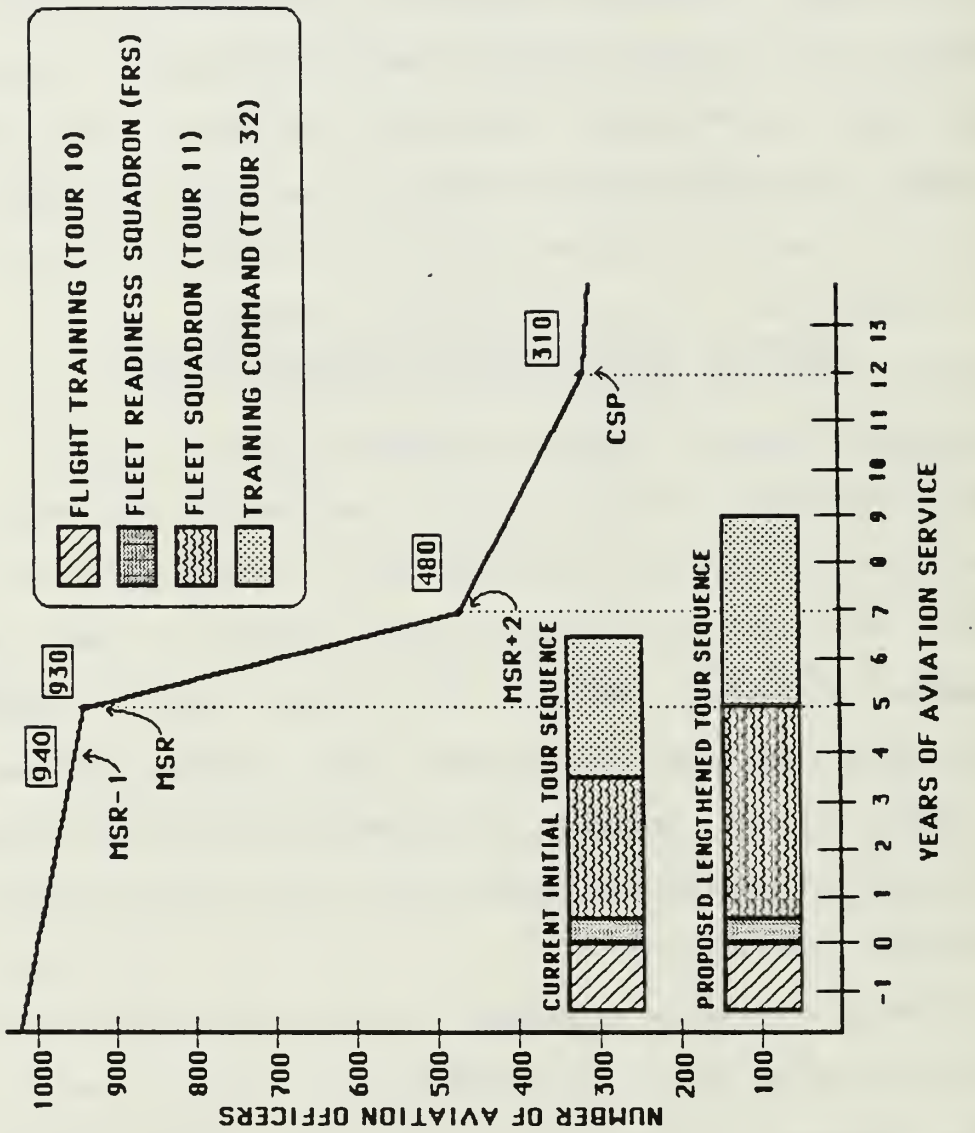


Figure 6.1 Early Tour Sequence (Current and Proposed) With Aviation Minimum Service Requirement

minus 1.5 years of aviation service. Aviation service and Minimum Obligated Service begin at the zero year point, when flight training is completed. In this example, 450 aviators (forty-five percent of the original cohort of 1000) leave the service between the eighteen months after completion of tour 11 and at or prior to the completion of the first shore assignment, as illustrated by the current tour sequence shown in Figure 6.1. If the aviation officer elects to leave at the MSR point the shore command will need a replacement approximately one year to eighteen months prior to what was originally expected. Often these shore assignments are gapped until a replacement can be found, but even if not, replacing officers every eighteen months in what are designed to be thirty to thirty-six month tours, is unacceptably expensive and destabilizing.

B. EFFECT OF INCREASING LENGTH OF INITIAL FLEET SQUADRON TOUR

By increasing the Fleet Squadron Tour (tour 11) by 18 months, the end of that tour would coincide with the Minimum Service Requirement. This would save the cost of moving those 450 aviators who opted to leave the service at their MSR. Those aviators who would rotate ashore at the MSR point would be mostly officers desiring to remain in the Navy for a career. This tour sequence is illustrated in the proposed tour sequence at the bottom of Figure 6.1. This decrease in turbulence in personnel movement in the first shore tour would create favorable command stability. Opposition to increasing this initial Fleet Squadron sea duty (tour 11) is anticipated to be strong. The question must be asked why people volunteer to make aviation a career. The answer is,

aviators want to fly! After completing tour 11 and rotating ashore, the majority of the shore flying billets are found at the FRS and Aviation Training Command. However, approximately one third of the aviators rotated ashore are to non-flying assignments. After reevaluation of the shore establishment Lieutenant non-flying billets (designated 13XX), it is possible that many of them could be redesignated to become 1000 or 1050 billets. This would be necessary because, as the time at the Fleet Squadron (tour 11) is lengthened, fewer aviators would be made available each period to fill shore assignments.

As an example, there are requirements for nearly 1500 aviators, Lieutenants and below, in the Fleet Squadrons of the Maritime Patrol Community. A three year long initial Fleet Squadron assignment (tour 11), means that in order to keep 1500 Lieutenant aviators in the squadrons every year, 500 newly reporting LTJGs from the FRS are needed every year as that many are rotated each year to ashore billets at the end of their three year assignments. With the proposed four and one half year Fleet Squadron (tour 11) both input and output are reduced to 333 aviators per year. This is a difference of 167 fewer aviators per year that the Training Command would not have to train. It would also mean a savings of 167 PCS moves per year, assuming 50% retention. This is true once steady state is reached after a transistion period of making the change.

Of course, the negative side of this proposal is that there are 167 fewer aviators per year available for assignment to shore billets at the end of the first Fleet tour. This problem can be partially solved by increasing the length of the first shore tour as well. This could be

justified by the argument that if the first sea tour is lengthened, compensation for it can be given by increasing the initial shore assignment during the second tour.

C. ACTUAL AT SEA TIME IN LENGTHENED INITIAL TOUR

In a four and one half year sea tour, it would be of benefit to know how much actual at sea time the aviator would end up spending. Tables 6.1 and 6.2 illustrate this for two cases. If an aviator arrives at his initial fleet squadron and immediately deploys on a nine month cruise, after returning home for six months, he repeats the cycle over again until the tour is complete. Four nine month cruises and a total of thirty-six months at sea will be accumulated during this tour as shown in Table 6.1. Now suppose the aviator arrived while the squadron was just returning from a deployment, stayed ashore for six months, and then deployed for the nine month cruise, repeating the cycle until the tour is complete. Under this cycle, a 4½ year initial sea tour would have this aviator making three nine month deployments with a three month gap at the end, as shown in Table 6.2.

TABLE 6.1

AT SEA TIME FOR THE PROPOSED 4½ YEAR FLEET SQUADRON TOUR (DEPLOY IMMEDIATELY)

CRUISE SCHEDULE	9 OUT	6 IN	9 OUT	6 IN	9 OUT	6 IN	9 OUT
CUMULATIVE MONTHS IN ASSIGNMENT	9	15	24	30	39	45	54

TABLE 6.2

AT SEA TIME FOR THE PROPOSED 4½ YEAR FLEET SQUADRON TOUR
(DEPLOY AFTER SIX MONTHS)

CRUISE SCHEDULE	6 IN	9 OUT	6 IN	9 OUT	6 IN	9 OUT	6 IN	3 OUT
CUMULATIVE MONTHS IN ASSIGNMENT	6	15	21	30	36	45	51	54

D. FIVE TOUR SEQUENCE TO AVIATION COMMAND

As an overall goal, a reduction of one PCS move per twenty year aviation officer career is proposed. The largest dollar savings would occur if this suggested one PCS move was eliminated in the first nine or ten years of aviation service when greater overall numbers of officers are on active duty as illustrated in Figure 6.1. Instead of six assignment tours through the Aviation Command point, five is the number recommended. The individual's aviation career would not suffer as this recommendation is proposed as an across the board change for every aviator. Examples of aviation career paths for this new proposal are shown in Figure 6.2 using the method developed in Chapter III. The tour sequences are listed in Table 6.3. The numbers in parentheses after tour assignment number represent the tour length in years.

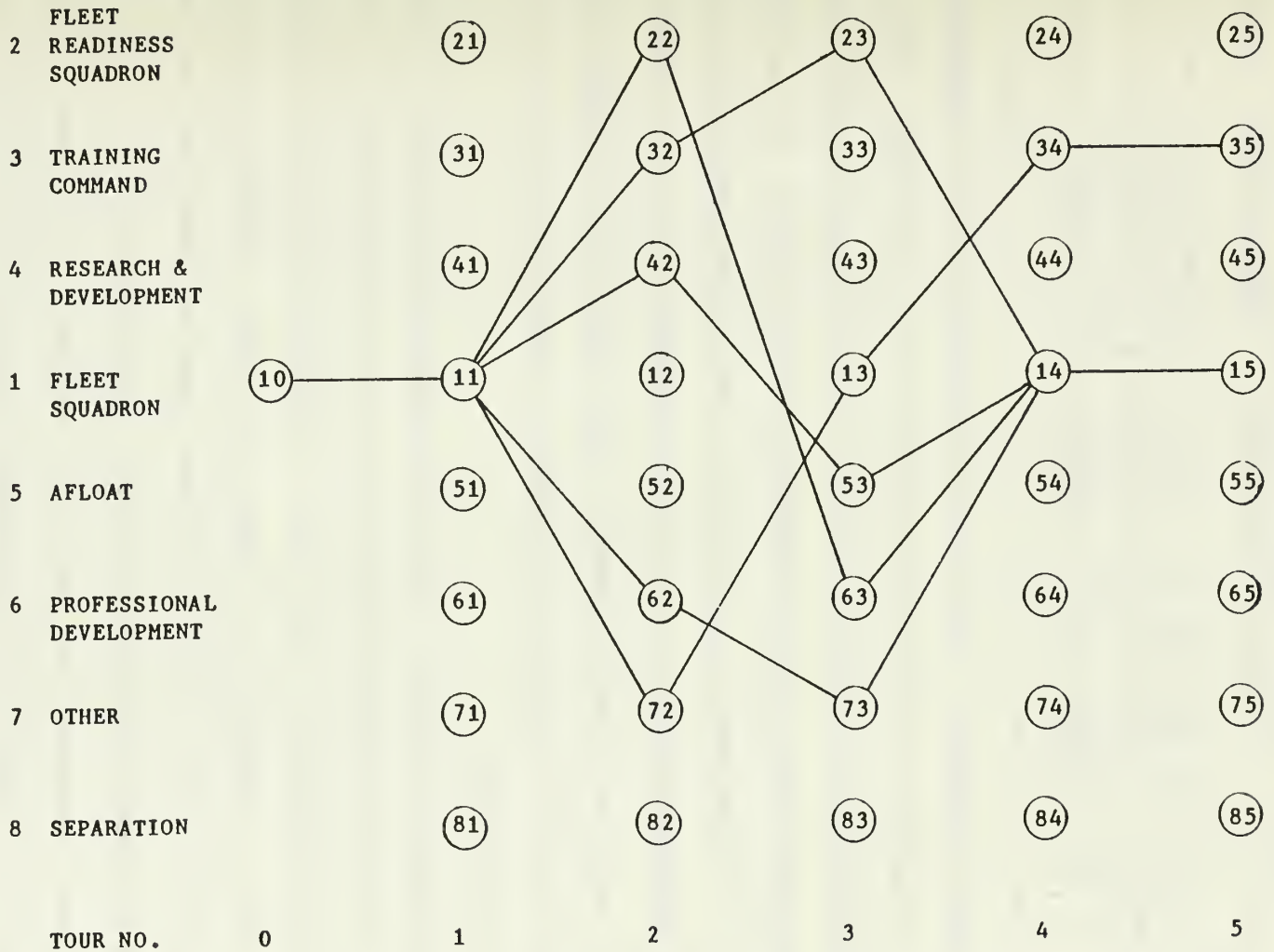


Figure 6.2 Tour Sequence of Five Tour Aviation Command Selectee

TABLE 6.3

POSSIBLE FIVE TOUR SEQUENCES OF AVIATION COMMAND SELECTEES

ASSIGN. SEQ.	TOUR NO. 0 (YRS)	1 (YRS)	2 (YRS)	3 (YRS)	4 (YRS)	5 (YRS)
V	10 (1½)	11 (4½)	22 (4)	63 (1)	14 (3)	15 (3)
W	10 (1½)	11 (4½)	32 (3)	23 (3)	14 (3)	15 (3)
X	10 (1½)	11 (4½)	42 (4)	53 (2)	14 (3)	15 (3)
Y	10 (1½)	11 (4½)	62 (2)	73 (3)	14 (3)	15 (3)
Z	10 (1½)	11 (4½)	72 (4)	13 (3)	34 (3)	35 (3)

Assignment Sequence V in Table 6.3 represents a successful aviation career path during which the officer completes the lengthened initial four and one half year Fleet Squadron tour (tour 11) and then reports to the lengthened four year Fleet Readiness Squadron (tour 22). From there, the officer moves on to a one year Professional Development tour at the Naval War College (tour 63), followed by a three year Fleet Squadron Department Head assignment (tour 14). This officer is successful in his selection for squadron command and reports for an XO/CO tour (tour 15).

In assignment sequence W, after the lengthened Fleet Squadron (tour 11), the officer reports for duty at the Training Command (tour 32) for a three year assignment. This tour is immediately followed by a second shore tour in succession to a three year Fleet Readiness Squadron assignment (tour 23). The Fleet Squadron Department Head (tour 14) is followed by squadron command in the Fleet Squadron (tour 15).

Assignment sequence X has the officer spending a longer shore flying assignment at a Research and Development Squadron (tour 42) followed by

a short Afloat (tour 53). The Fleet Squadron Department Head (tour 14) and XO/CO (tour 15) assignments follow in order.

In assignment sequence Y, after the Fleet Squadron (tour 11), the officer is assigned to Postgraduate School for two years in a Professional Development tour (tour 62). This is immediately followed by a required education payback assignment (tour 73). The sequence is the same as sequence V for the remaining two assignments.

Assignment sequence Z has the officer spending a longer shore assignment in a Staff billet (tour 72) after completing the initial Fleet Squadron (tour 11). The next assignment is to a Fleet Squadron for an early Department Head tour (tour 13) and then rotating ashore to a Training Command billet (tour 34). This sequence has the officer being selected as XO/CO of a Training Command Squadron (tour 35).

The assignment sequences presented in this section meet the reduced PCS movement goal proposed here.

VII. CONCLUSION

The introduction in Chapter I pointed out the conflict that occurs in the Navy when pressure from Congress to reduce personnel movement and PCS costs is in apparent conflict with the aviation officer's need to gain necessary professional growth to succeed by executing a sequence of various assignments. Chapter IV pointed out the increase in aviation PCS movement patterns over fiscal year 1980 through fiscal year 1984 and its unwanted side effect of increased turbulence in the Aviation Officer Community. Chapter V, through the use of the model "Aviation Officer Requirements," suggested that increased tour lengths over what are presently occurring, would possibly provide a more optimal return on the investment of PCS dollars expended per aviation tour. Chapter VI recommended lengthening the first Fleet Squadron tour (tour 11) to coincide with the aviation Minimum Service Requirement in order to reduce unnecessary movement of large numbers of aviation officers who elect to leave the service at the MSR. This proposed increase in the length of the Fleet Squadron tour is to be made more palatable to the Naval aviator by increasing the subsequent shore tour length as well. Suggested complete tour sequences for the reduced movement of aviation officers was presented. The overall benefit to the Navy, if the recommendations in Chapter VI were adopted could mean:

1. Increased individual officer efficiency;
2. Improvements in overall unit and air squadron readiness due to less personnel turnover;
3. Reduction in overall aviation officer training requirements;
4. Savings in costs associated with fewer officer rotations.

As postulated in Chapter I, the armed service seen by Congress as the most efficient in the management of personnel movements and effective in reducing costs, will benefit the most in the procurement of much needed additional hardware in the upcoming tighter budget years.

APPENDIX A

TRENDS IN PCS MOVES AND COSTS BY MOVE CATEGORY FOR THE ENTIRE U.S. NAVY FOR FYs 1980 TO 1984

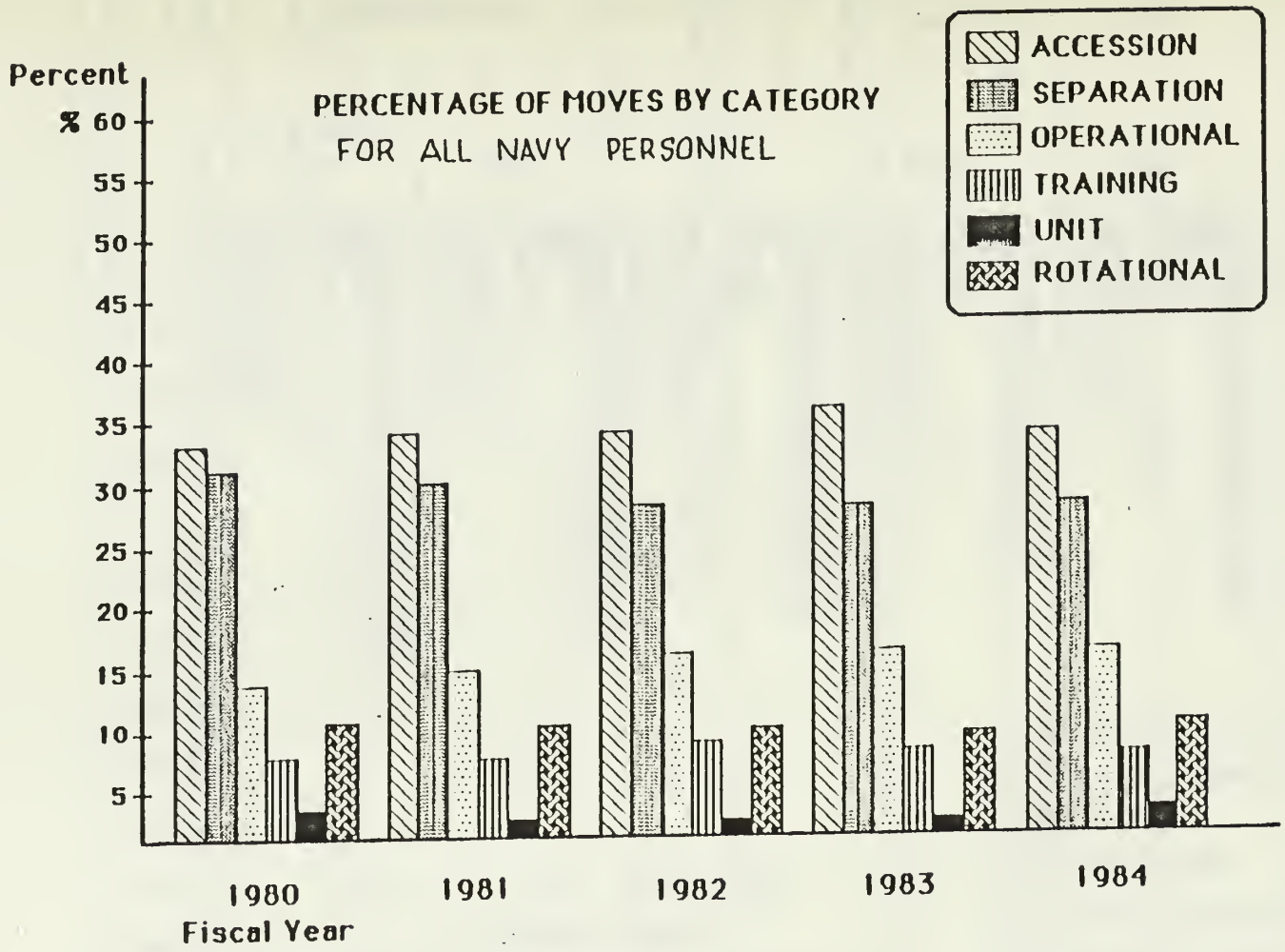
NUMBER OF MOVES IN THOUDANDS

TYPE	FY80	(%)	FY81	(%)	FY82	(%)	FY83	(%)	FY84	(%)
ACCESSION	101.8	(33)	114.5	(34)	106.7	(34)	108.4	(36)	107.9	(34)
SEPARATION	97.0	(31)	99.3	(30)	86.0	(28)	85.3	(28)	89.4	(28)
OPERATIONAL	43.2	(14)	48.4	(15)	51.2	(16)	48.2	(16)	51.3	(16)
TRAINING	25.0	(8)	25.8	(8)	27.3	(9)	26.0	(8)	27.1	(8)
UNIT	7.8	(3)	6.4	(2)	5.0	(2)	7.5	(2)	10.9	(3)
ROTATIONAL	32.9	(11)	35.9	(11)	35.0	(11)	29.0	(10)	36.6	(11)
TOTAL	307.7	(100)	330.3	(100)	311.2	(100)	304.4	(100)	323.2	(100)

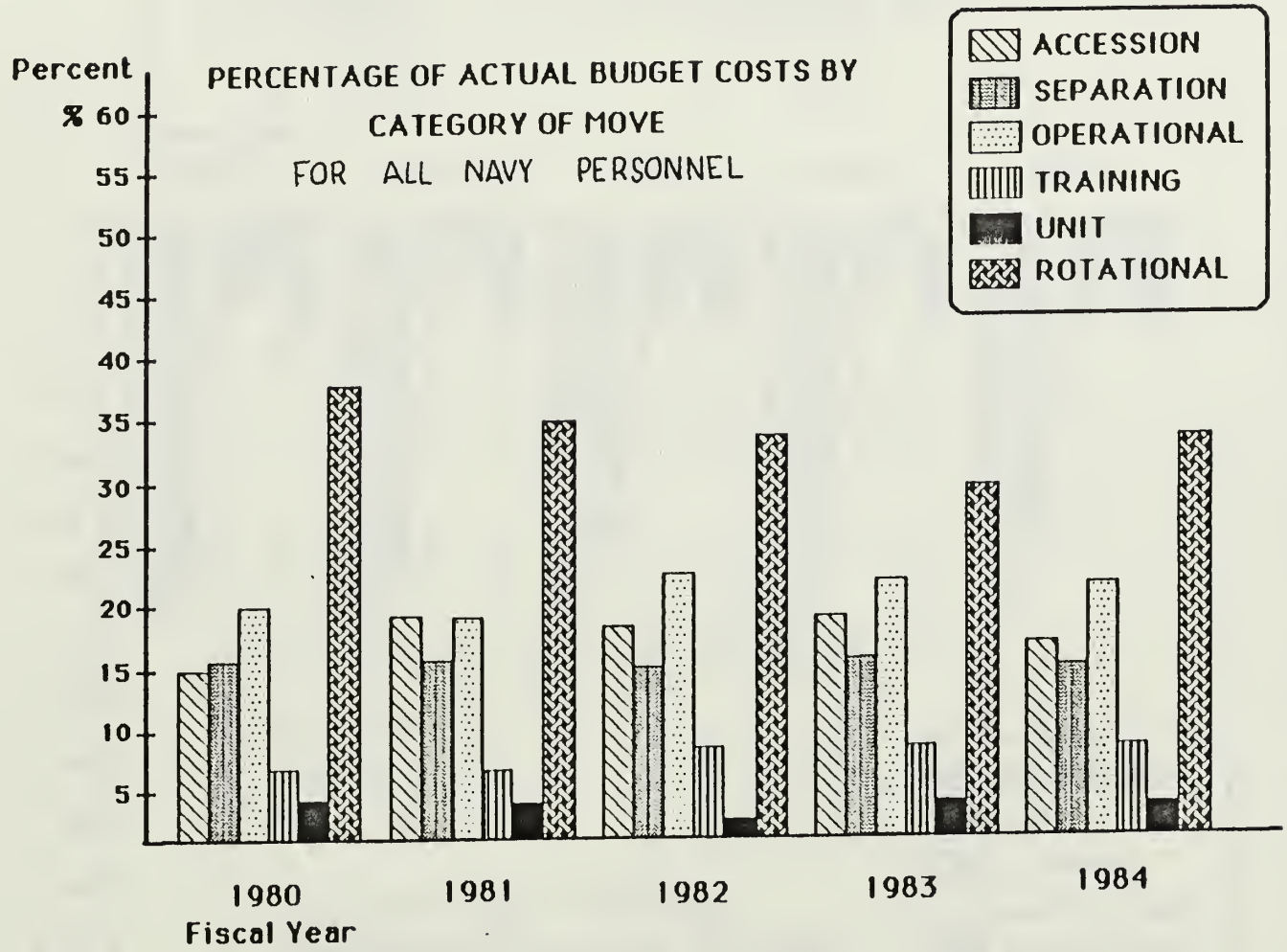
TOTAL COSTS IN MILLIONS OF DOLLARS

TYPE	FY80	(%)	FY81	(%)	FY82	(%)	FY83	(%)	FY84*	(%)
ACCESSION	59.8	(15)	104.5	(19)	95.8	(18)	99.9	(19)	102.7	(17)
SEPARATION	64.4	(16)	89.6	(16)	83.9	(15)	86.4	(16)	93.6	(15)
OPERATIONAL	76.3	(20)	106.4	(19)	128.4	(23)	124.9	(23)	138.3	(22)
TRAINING	27.7	(7)	36.2	(7)	45.9	(8)	45.5	(8)	47.9	(8)
UNIT	16.0	(4)	23.4	(4)	11.9	(2)	21.3	(4)	26.2	(4)
ROTATIONAL	147.9	(38)	192.5	(35)	189.5	(34)	159.0	(30)	214.5	(34)
TOTAL	392.1	(100)	552.6	(100)	555.4	(100)	537.4	(100)	623.2	(100)

*Requested amounts



$$\text{PERCENTAGES} = \frac{\text{Number of Moves by Category}}{\text{Total Number PCS Moves}} \times 100$$



$$\text{PERCENTAGES} = \frac{\$ \text{ Cost for Category}}{\text{Total } \$ \text{ Cost}} \times 100$$

APPENDIX B

LISTING OF PCS ENTITLEMENTS

1. Mileage for privately-owned vehicle (POV).

2. Transportation by common carrier (rail, bus, air, or water, including Military Airlift Command (MAC) and Military Sealift Command (MSC)).

3. Per diem allowances.

4. Actual and necessary expenses and cost of subsistence while in a travel status.

5. Issue of meal tickets in lieu of subsistence.

6. Travel of dependents and transportation of baggage and household goods.

7. Port handling charges for personnel, their household goods, baggage, and privately owned automobiles passing through CONUS Military Traffic Management Command (MTMC) terminals.

8. Payment of dislocation allowances.

9. Authorized transportation of dependents and personal and household effects of deceased military personnel.

10. Costs of contract packing, crating, handling, and temporary storage of household goods.

11. Cost of non-temporary storage of household goods.

12. Cost of trailer allowances.

13. Travel incident to organizational movements.

14. Expenses incident to PCS movement of any military group travelling under one set of orders from the same point of origin to the same destination.

15. Minor supplies and services incident to organizational PCS movements, expenses, and allowances incident to separation, discharge, or release.

16. Authorized temporary duty travel directly related to and an integral part of PCS movements.

APPENDIX C

SCHEDULE OF ENTITLEMENTS AS A PERCENTAGE OF THE TOTAL NAVY PCS BUDGET

Entitlement	Percentage of Total PCS Budget				
	1980	1981	1982	1983	1984
Travel of member	25.1	36.8	34.8	34.9	30.7
Travel of dependent	5.2	4.6	3.9	3.8	3.7
Transportation of household goods	60.8	51.1	54.0	54.0	53.8
Dislocation allowance	3.1	2.6	3.0	3.1	3.0
Trailer allowance	(a)	(a)	(a)	(a)	(a)
Transportation of POVs	3.3	3.0	2.8	2.7	3.3
Port Handling Charges	1.1	1.0	.8	.9	1.0
Non-Temporary Storage	1.8	1.2	1.2	1.2	1.2

Note a: Less than 1 percent

AVIATION OFFICER REQUIREMENTS EXAMPLE OUTPUT DATA

THIRTY MONTH MULTIPLE RUN SUMMARY

SUMMARY DATA

LIGHT ATTACK COMMUNITY
NAVAL AVIATORS

RETENTION	60 %	NUMBER OF SQUADRONS	25
		AIRCRAFT PER SQUADRON	12
PLOWBACK FRACTION	5 %	CREW FACTOR	1.42
		NAVAL AVIATORS PER CREW	1.00

COMMUNITY POPULATION

ACCESSIONS TO TRAINING (139X)	142	SENIOR COMMANDERS	133		
		COMMANDERS	162	COMMAND OPPORTUNITY	.66
ACCESSIONS TO 131X DESIGNATOR	105	LT. COMMANDERS	229	DEPT HEAD OPPORTUNITY	.92
FIRST TOUR LENGTH	39	LIEUTENANTS	722		
		TOTALS	1246		

DISTRIBUTION BY GRADE AND ACTIVITY

ACTIVITY	GRADE LT	LCDR	CDR	SEN CDR	TOTAL	ACIP PROJECTIONS	
FLEET TOURS	416	113	58	34	625		
FLEET READINESS SQUADRON	88	17	7	2	114	GATE 1	1.53
TRAINING COMMAND	94	13	7	0	114	GATE 2	1.25
R&D COMMUNITY	23	14	3	4	43	GATE 3	1.53
AFLOAT ASSIGNMENTS	21	7	15	22	65		
PROFESSIONAL EDUCATION	25	6	8	5	44		
OTHER	42	48	59	53	223		
NON-AVIATION ASSIGNMENTS	7	6	0	5	18	NON-AVIATION	1 %
LOWER GRADE FILLS		53	0			HI UP DETAIL (LCDR)	20%

TOTAL ANNUAL PCS MOVES THIS COMMUNITY 506

SUMMARY DATA

FIGHTER COMMUNITY
NAVAL AVIATORS

RETENTION	60 %			NUMBER OF SQUADRONS	22
				AIRCRAFT PER SQUADRON	12
PLOWBACK FRACTION	5 %			CREW FACTOR	1.17
				NAVAL AVIATORS PER CREW	1.00

COMMUNITY POPULATION

ACCESSIONS TO TRAINING (139X)	110	SENIOR COMMANDERS	87		
		COMMANDERS	126	COMMAND OPPORTUNITY	.37
ACCESSIONS TO 131X DESIGNATOR	78	LT. COMMANDERS	182	DEPT HEAD OPPORTUNITY	1.09
FIRST TOUR LENGTH	37	LIEUTENANTS	539		
		TOTALS	934		

DISTRIBUTION BY GRADE AND ACTIVITY

ACTIVITY	GRADE LT	LCDR	CDR	SEN CDR	TOTAL	ACIP PROJECTIONS	
FLEET TOURS	295	88	9	21	403		
FLEET READINESS SQUADRON	136	14	12	0	162	GATE 1	1.59
TRAINING COMMAND	70	3	10	0	83	GATE 2	1.26
R&D COMMUNITY	3	17	7	0	27	GATE 3	1.54
AFLOAT ASSIGNMENTS	11	13	12	0	35		
PROFESSIONAL EDUCATION	12	9	12	0	33		
OTHER	22	33	70	16	148		
NON-AVIATION ASSIGNMENTS	0	0	0	46	46	NON-AVIATION	5 %
LOWER GRADE FILLS		17	4			HI UP DETAIL (LCDR)	9%

TOTAL ANNUAL PCS MOVES THIS COMMUNITY 395

SUMMARY DATA

MEDIUM ATTACK COMMUNITY
NAVAL AVIATORS

RETENTION	50 %	NUMBER OF SQUADRONS	13
		AIRCRAFT PER SQUADRON	14
PLOWBACK FRACTION	5 %	CREW FACTOR	1.14
		NAVAL AVIATORS PER CREW	1.00

COMMUNITY POPULATION

ACCESSIONS TO TRAINING (139X)	82	SENIOR COMMANDERS	55		
		COMMANDERS	68	COMMAND OPPORTUNITY	.38
ACCESSIONS TO 131X DESIGNATOR	44	LT. COMMANDERS	96	DEPT HEAD OPPORTUNITY	1.02
FIRST TOUR LENGTH	41	LIEUTENANTS	302		
		TOTALS	521		

DISTRIBUTION BY GRADE AND ACTIVITY

ACTIVITY	GRADE LT	LCDR	CDR	SEN CDR	TOTAL	ACIP PROJECTIONS	
FLEET TOURS	177	50	19	12	259		
FLEET READINESS SQUADRON	45	3	1	1	50	GATE 1	1.56
TRAINING COMMAND	39	5	3	0	48	GATE 2	1.25
R&D COMMUNITY	9	6	2	1	18	GATE 3	1.52
AFLOAT ASSIGNMENTS	9	2	5	5	21		
PROFESSIONAL EDUCATION	10	3	3	2	18		
OTHER	12	27	37	19	95		
NON-AVIATION ASSIGNMENTS	0	0	0	12	12	NON-AVIATION	2 %
LOWER GRADE FILLS		19	0			HI UP DETAIL (LCDR)	16%

TOTAL ANNUAL PCS MOVES THIS COMMUNITY 213

SUMMARY DATA

ELECTRONIC WARFARE COMMUNITY
NAVAL AVIATORS

RETENTION	60 %		NUMBER OF SQUADRONS	11	
			AIRCRAFT PER SQUADRON	4	
PLOWBACK FRACTION	5 %		CREW FACTOR	1.50	
			NAVAL AVIATORS PER CREW	1.00	

COMMUNITY POPULATION

ACCESSIONS TO TRAINING (139X)	26	SENIOR COMMANDERS	24		
		COMMANDERS	33	COMMAND OPPORTUNITY	.52
ACCESSIONS TO 131X DESIGNATOR	20	LT. COMMANDERS	48	DEPT HEAD OPPORTUNITY	.97
FIRST TOUR LENGTH	41	LIEUTENANTS	141		
		TOTALS	246		

DISTRIBUTION BY GRADE AND ACTIVITY

ACTIVITY	GRADE LT	LCDR	CDR	SEN CDR	TOTAL	ACIP PROJECTIONS	
FLEET TOURS	79	20	13	3	115		
FLEET READINESS SQUADRON	37	1	1	0	39	GATE 1	1.57
TRAINING COMMAND	14	2	2	0	17	GATE 2	1.28
R&D COMMUNITY	1	4	1	0	7	GATE 3	1.56
AFLOAT ASSIGNMENTS	2	5	3	0	10		
PROFESSIONAL EDUCATION	2	4	2	0	8		
OTHER	5	12	13	12	42		
NON-AVIATION ASSIGNMENTS	0	0	0	7	7	NON-AVIATION	3 %
LOWER GRADE FILLS		2	1			HI UP DETAIL (LCDR)	4%

TOTAL ANNUAL PCS MOVES THIS COMMUNITY 103

SUMMARY DATA

CARRIER BASED ASW COMMUNITY
NAVAL AVIATORS

RETENTION	60 %	NUMBER OF SQUADRONS	11
		AIRCRAFT PER SQUADRON	9
FLOWBACK FRACTION	5 %	CREW FACTOR	1.37
		NAVAL AVIATORS PER CREW	1.30

COMMUNITY POPULATION

ACCESSIONS TO TRAINING (1397)	52	SENIOR COMMANDERS	48		
		COMMANDERS	66	COMMAND OPPORTUNITY	.30
ACCESSIONS TO 131X DESIGNATOR	37	LT. COMMANDERS	98	DEPT HEAD OPPORTUNITY	1.01
FIRST TOUR LENGTH	45	LIEUTENANTS	257		
		TOTALS	457		

DISTRIBUTION BY GRADE AND ACTIVITY

ACTIVITY	GRADE LT	LCDR	CDR	SEN CDR	TOTAL	ACIP PROJECTIONS	
FLEET TOURS	156	41	5	12	213		
FLEET READINESS SQUADRON	47	4	3	1	55	GATE 1	1.56
TRAINING COMMAND	33	2	5	0	41	GATE 2	1.25
R&D COMMUNITY	8	3	4	1	16	GATE 3	1.50
AFLCAT ASSIGNMENTS	3	7	6	5	21		
PROFESSIONAL EDUCATION	3	7	6	0	16		
OTHER	5	23	40	14	83		
NON-AVIATION ASSIGNMENTS	0	0	0	10	10	NON-AVIATION	2 %
LOWER GRADE FILLS		6	0			HI UP DETAIL (LCDR)	6%

TOTAL ANNUAL PCS MOVES THIS COMMUNITY 189

SUMMARY DATA

FORCE SUPPORT - JET COMMUNITY
NAVAL AVIATORS

RETENTION	60 %	NUMBER OF SQUADRONS	13
		AIRCRAFT PER SQUADRON	0
FLOWBACK FRACTION	5 %	CREW FACTOR	0.00
		NAVAL AVIATORS PER CREW	0.00

COMMUNITY POPULATION

ACCESSIONS TO TRAINING (139X)	95	SENIOR COMMANDERS	92		
		COMMANDERS	105	COMMAND OPPORTUNITY	.47
ACCESSIONS TO 131X DESIGNATOR	69	LT. COMMANDERS	142	DEPT HEAD OPPORTUNITY	1.02
FIRST TOUR LENGTH	46	LIEUTENANTS	466		
		TOTALS	805		

DISTRIBUTION BY GRADE AND ACTIVITY

ACTIVITY	GRADE LT	LCDR	CDR	SEN CDR	TOTAL	ACIP PROJECTIONS	
FLEET TOURS	297	77	35	24	433		
FLEET READINESS SQUADRON	0	0	0	0	0	GATE 1	1.43
TRAINING COMMAND	61	8	4	2	75	GATE 2	1.16
R&D COMMUNITY	19	7	2	3	32	GATE 3	1.42
AFLOAT ASSIGNMENTS	5	14	7	14	41		
PROFESSIONAL EDUCATION	16	4	4	4	28		
OTHER	55	17	53	41	166		
NON-AVIATION ASSIGNMENTS	12	15	0	2	29	NON-AVIATION	4 %
LOWER GRADE FILLS		38	0			HI UP DETAIL (LCDR)	20%

TOTAL ANNUAL PCS MOVES THIS COMMUNITY 402

SUMMARY DATA

EARLY WARNING COMMUNITY
NAVAL AVIATORS

RETENTION	60 %	NUMBER OF SQUADRONS	13
		AIRCRAFT PER SQUADRON	3
PLOWBACK FRACTION	5 %	CREW FACTOR	1.65
		NAVAL AVIATORS PER CREW	2.00

COMMUNITY POPULATION

ACCESSIONS TO TRAINING (1139X)	34	SENIOR COMMANDERS	37		
		COMMANDERS	44	COMMAND OPPORTUNITY	.51
ACCESSIONS TO 131X DESIGNATOR	25	LT. COMMANDERS	57	DEPT HEAD OPPORTUNITY	.98
FIRST TOUR LENGTH	45	LIEUTENANTS	181		
		TOTALS	319		

DISTRIBUTION BY GRADE AND ACTIVITY

ACTIVITY	GRADE LT	LCDR	CDR	SEN CDR	TOTAL	ACIP PROJECTIONS	
FLEET TOURS	112	29	12	11	164		
FLEET READINESS SQUADRON	34	4	2	1	41	GATE 1	1.55
TRAINING COMMAND	12	1	1	0	14	GATE 2	1.24
R&D COMMUNITY	6	2	3	1	11	GATE 3	1.52
AFLOAT ASSIGNMENTS	5	2	4	3	14		
PROFESSIONAL EDUCATION	6	1	3	1	11		
OTHER	6	17	24	13	60		
NON-AVIATION ASSIGNMENTS	0	0	0	4	4	NON-AVIATION	1 %
LOWER GRADE FILLS		9	0			MI UP DETAIL (LCDR)	14%

TOTAL ANNUAL PCS MOVES THIS COMMUNITY 121

SUMMARY DATA

MARITIME PATROL COMMUNITY
NAVAL AVIATORS

RETENTION	60 %	NUMBER OF SQUADRONS	24
		AIRCRAFT PER SQUADRON	9
FLOWBACK FRACTION	5 %	CREW FACTOR	1.38
		NAVAL AVIATORS PER CREW	3.00

COMMUNITY POPULATION

ACCESSIONS TO TRAINING (139X)	258	SENIOR COMMANDERS	220		
		COMMANDERS	292	COMMAND OPPORTUNITY	.11
ACCESSIONS TO 131X DESIGNATOR	200	LT. COMMANDERS	426	DEPT HEAD OPPORTUNITY	.67
FIRST TOUR LENGTH	46	LIEUTENANTS	1368		
		TOTALS	2306		

DISTRIBUTION BY GRADE AND ACTIVITY

ACTIVITY	GRADE LT	LCDR	CDR	SEN CDR	TOTAL	ACIP PROJECTIONS	
FLEET TOURS	370	212	9	28	1119		
FLEET READINESS SQUADRON	87	7	1	1	96	GATE 1	1.38
TRAINING COMMAND	92	9	4	3	108	GATE 2	1.06
R&D COMMUNITY	43	25	12	2	82	GATE 3	1.30
AFLOAT ASSIGNMENTS	14	38	41	31	125		
PROFESSIONAL EDUCATION	48	14	23	0	84		
OTHER	145	42	192	55	437		
NON-AVIATION ASSIGNMENTS	69	80	14	94	256	NON-AVIATION	11 %
LOWER GRADE FILLS		90	28			HI UP DETAIL (LCDR)	20%

TOTAL ANNUAL PCS MOVES THIS COMMUNITY 919

SUMMARY DATA

ELECTRONIC WARFARE - VQ COMMUNITY
NAVAL AVIATORS

RETENTION	80 %	NUMBER OF SQUADRONS	4
		AIRCRAFT PER SQUADRON	0
PLOWBACK FRACTION	5 %	CREW FACTOR	0.00
		NAVAL AVIATORS PER CREW	0.00

COMMUNITY POPULATION

ACCESSIONS TO TRAINING (1390)	33	SENIOR COMMANDERS	29		
		COMMANDERS	39	COMMAND OPPORTUNITY	.06
ACCESSIONS TO 131X DESIGNATOR	28	LT. COMMANDERS	56	DEPT HEAD OPPORTUNITY	.43
FIRST TOUR LENGTH	58	LIEUTENANTS	176		
		TOTALS	300		

DISTRIBUTION BY GRADE AND ACTIVITY

ACTIVITY	GRADE LT	LCDR	CDR	SEN CDR	TOTAL
FLEET TOURS	134	22	5	0	161
FLEET READINESS SQUADRON	0	0	0	0	0
TRAINING COMMAND	11	2	1	0	14
R&D COMMUNITY	6	4	3	0	12
AFLOAT ASSIGNMENTS	0	4	4	2	11
PROFESSIONAL EDUCATION	6	2	3	0	11
OTHER	19	19	13	3	64
NON-AVIATION ASSIGNMENTS	1	2	6	17	27

ACIP PROJECTIONS		
GATE 1	1.50	
GATE 2	1.10	
GATE 3	1.34	
NON-AVIATION	9 %	

TOTAL ANNUAL PCS MOVES THIS COMMUNITY 136

SUMMARY DATA

FORCE SUPPORT - PROP COMMUNITY
NAVAL AVIATORS

RETENTION	60 %	NUMBER OF SQUADRONS	2
		AIRCRAFT PER SQUADRON	0
PLOWBACK FRACTION	5 %	CREW FACTOR	0.00
		NAVAL AVIATORS PER CREW	0.00

COMMUNITY POPULATION

ACCESSIONS TO TRAINING (1139X)	11	SENIOR COMMANDERS	11		
		COMMANDERS	14	COMMAND OPPORTUNITY	.10
ACCESSIONS TO 131X DESIGNATOR	5	LT. COMMANDERS	18	DEPT HEAD OPPORTUNITY	.88
FIRST TOUR LENGTH	39	LIEUTENANTS	56		
		TOTALS	99		

DISTRIBUTION BY GRADE AND ACTIVITY

ACTIVITY	GRADE LT	LCDR	CDR	SEN CDR	TOTAL	ACIP PROJECTIONS	
FLEET TOURS	43	10	2	0	56		
FLEET READINESS SQUADRON	0	0	0	0	0	GATE 1	1.58
TRAINING COMMAND	3	1	1	0	5	GATE 2	1.16
R&D COMMUNITY	2	1	1	0	4	GATE 3	1.42
AFLOAT ASSIGNMENTS	0	0	1	1	2		
PROFESSIONAL EDUCATION	2	0	1	0	3		
OTHER	6	5	7	3	21		
NON-AVIATION ASSIGNMENTS	0	0	1	7	8	NON-AVIATION	8 %

TOTAL ANNUAL PCS MOVES THIS COMMUNITY 44

SUMMARY DATA

HELICOPTER ASW COMMUNITY
NAVAL AVIATORS

RETENTION	60 %	NUMBER OF SQUADRONS	13
		AIRCRAFT PER SQUADRON	6
PLOWBACK FRACTION	5 %	CREW FACTOR	1.66
		NAVAL AVIATORS PER CREW	2.00

COMMUNITY POPULATION

ACCESSIONS TO TRAINING (131X)	71	SENIOR COMMANDERS	70		
		COMMANDERS	84	COMMAND OPPORTUNITY	.61
ACCESSIONS TO 131X DESIGNATOR	53	LT. COMMANDERS	112	DEPT HEAD OPPORTUNITY	1.06
FIRST TOUR LENGTH	45	LIEUTENANTS	361		
		TOTALS	627		

DISTRIBUTION BY GRADE AND ACTIVITY

ACTIVITY	GRADE LT	LCDR	CDR	SEN CDR	TOTAL	ACIP PROJECTIONS	
FLEET TOURS	227	56	33	20	338		
FLEET READINESS SQUADRON	57	14	4	2	77	GATE 1	1.57
TRAINING COMMAND	30	2	2	0	33	GATE 2	1.29
R&D COMMUNITY	11	6	2	2	21	GATE 3	1.57
AFLOAT ASSIGNMENTS	9	4	3	10	31		
PROFESSIONAL EDUCATION	13	2	4	3	22		
OTHER	15	26	34	28	104		
NON-AVIATION ASSIGNMENTS	0	0	0	3	3	NON-AVIATION	0 %
LOWER GRADE FILLS		23	0			HI UP DETAIL (LCDR)	20%

TOTAL ANNUAL PCS MOVES THIS COMMUNITY 238

SUMMARY DATA

LAMPS MK I COMMUNITY
NAVAL AVIATORS

RETENTION	60 %	NUMBER OF SQUADRONS	6
		AIRCRAFT PER SQUADRON	10
PLOWBACK FRACTION	5 %	CREW FACTOR	2.30
		NAVAL AVIATORS PER CREW	2.00

COMMUNITY POPULATION

ACCESSIONS TO TRAINING (139X)	81	SENIOR COMMANDERS	66		
		COMMANDERS	94	COMMAND OPPORTUNITY	.30
ACCESSIONS TO 131X DESIGNATOR	60	LT. COMMANDERS	131	DEPT HEAD OPPORTUNITY	1.01
FIRST TOUR LENGTH	37	LIEUTENANTS	413		
		TOTALS	706		

DISTRIBUTION BY GRADE AND ACTIVITY

ACTIVITY	GRADE LT	LCDR	CDR	SEN CDR	TOTAL	ACIP PROJECTIONS	
FLEET TOURS	232	59	29	7	336		
FLEET READINESS SQUADRON	57	13	2	2	74	GATE 1	1.46
TRAINING COMMAND	34	3	2	0	38	GATE 2	1.17
R&D COMMUNITY	13	8	3	1	24	GATE 3	1.43
AFLOAT ASSIGNMENTS	10	5	8	6	29		
PROFESSIONAL EDUCATION	14	4	7	0	25		
OTHER	38	19	46	23	126		
NON-AVIATION ASSIGNMENTS	16	10	0	27	53	NON-AVIATION	8 %
LOWER GRADE FILLS		35	0			HI OP DETAIL (LCDR)	20%

TOTAL ANNUAL PCS MOVES THIS COMMUNITY 278

SUMMARY DATA

LAMPS MK III COMMUNITY
NAVAL AVIATORS

RETENTION	60 %	NUMBER OF SQUADRONS	8
		AIRCRAFT PER SQUADRON	13
FLOWBACK FRACTION	5 %	CREW FACTOR	2.27
		NAVAL AVIATORS PER CREW	2.00

COMMUNITY POPULATION

ACCESSIONS TO TRAINING (131X)	139	SENIOR COMMANDERS	113		
		COMMANDERS	156	COMMAND OPPORTUNITY	.24
ACCESSIONS TO 131X DESIGNATOR	103	LT. COMMANDERS	224	DEPT HEAD OPPORTUNITY	.98
FIRST TOUR LENGTH	38	LIEUTENANTS	706		
		TOTALS	1199		

DISTRIBUTION BY GRADE AND ACTIVITY

ACTIVITY	GRADE LT	LCDR	CDR	SEN CDR	TOTAL	ACIP PROJECTIONS	
FLEET TOURS	399	115	44	7	566		
FLEET READINESS SQUADRON	47	7	0	2	56	GATE 1	1.33
TRAINING COMMAND	55	5	5	0	65	GATE 2	1.06
R&D COMMUNITY	21	14	4	1	40	GATE 3	1.29
AFLOAT ASSIGNMENTS	15	10	14	11	50		
PROFESSIONAL EDUCATION	25	9	10	0	44		
OTHER	71	35	32	27	215		
NON-AVIATION ASSIGNMENTS	70	29	0	63	162	NON-AVIATION	14 %
LOWER GRADE FILLS		54	5			HI UP DETAIL (LCDR)	20%

TOTAL ANNUAL PCS MOVES THIS COMMUNITY 496

SUMMARY DATA

FORCE SUPPORT - HELO COMMUNITY
NAVAL AVIATORS

RETENTION	60 %	NUMBER OF SQUADRONS	8
		AIRCRAFT PER SQUADRON	0
FLOWBACK FRACTION	5 %	CREW FACTOR	0.00
		NAVAL AVIATORS PER CREW	0.00

COMMUNITY POPULATION

ACCESSIONS TO TRAINING (1399X)	104	SENIOR COMMANDERS	69		
		COMMANDERS	119	COMMAND OPPORTUNITY	.19
ACCESSIONS TO 131X DESIGNATOR	77	LT. COMMANDERS	158	DEPT HEAD OPPORTUNITY	.69
FIRST TOUR LENGTH	45	LIEUTENANTS	530		
		TOTALS	906		

DISTRIBUTION BY GRADE AND ACTIVITY

ACTIVITY	GRADE LT	LCDR	CDR	SEN CDR	TOTAL	ACIP PROJECTIONS	
FLEET TOURS	331	69	5	16	421		
FLEET READINESS SQUADRON	0	0	0	0	0	GATE 1	1.26
TRAINING COMMAND	43	4	2	0	49	GATE 2	.96
R&D COMMUNITY	20	3	8	0	31	GATE 3	1.18
AFLOAT ASSIGNMENTS	6	21	6	13	46		
PROFESSIONAL EDUCATION	19	5	7	2	33		
OTHER	54	26	63	20	163		
NON-AVIATION ASSIGNMENTS	58	40	32	35	164	NON-AVIATION	18 %
LOWER GRADE FILLS		30	12			HI UP DETAIL (LCDR)	20%

TOTAL ANNUAL PCS MOVES THIS COMMUNITY 450

SUMMARY DATA

FIGHTER COMMUNITY
NAVAL FLIGHT OFFICERS

RETENTION	74 %	NUMBER OF SQUADRONS	22
		AIRCRAFT PER SQUADRON	12
FLOWBACK FRACTION	5 %	CREW FACTOR	1.17
		NAVAL FLIGHT OFFICERS PER CREW	1.00

COMMUNITY POPULATION

ACCESSIONS TO TRAINING (137X)	112	SENIOR COMMANDERS	32		
		COMMANDERS	111	COMMAND OPPORTUNITY	.27
ACCESSIONS TO 132X DESIGNATOR	63	LT. COMMANDERS	159	DEPT HEAD OPPORTUNITY	.68
FIRST TOUR LENGTH	46	LIEUTENANTS	447		
		TOTALS	799		

DISTRIBUTION BY GRADE AND ACTIVITY

ACTIVITY	GRADE LT	LCDR	CDR	SEN CDR	TOTAL	ACIP PROJECTIONS	
FLEET TOURS	275	72	14	19	378		
FLEET READINESS SQUADRON	78	11	4	2	94	GATE 1	1.42
TRAINING COMMAND	17	2	1	0	20	GATE 2	1.11
R&D COMMUNITY	12	5	2	0	19	GATE 3	1.36
AFLOAT ASSIGNMENTS	4	12	9	2	27		
PROFESSIONAL EDUCATION	18	4	9	0	31		
OTHER	32	29	48	8	118		
NON-AVIATION ASSIGNMENTS	14	24	29	47	113	NON-AVIATION	14 %
LOWER GRADE FILLS		29	9			HI UP DETAIL (LCDR)	20%

TOTAL ANNUAL PCS MOVES THIS COMMUNITY 367

SUMMARY DATA

MEDIUM ATTACK COMMUNITY
NAVAL FLIGHT OFFICERS

RETENTION	74 %	NUMBER OF SQUADRONS	13
		AIRCRAFT PER SQUADRON	14
PLOWBACK FRACTION	5 %	CREW FACTOR	1.14
		NAVAL FLIGHT OFFICERS PER CREW	1.00

COMMUNITY POPULATION

ACCESSIONS TO TRAINING (137X)	69	SENIOR COMMANDERS	51		
		COMMANDERS	67	COMMAND OPPORTUNITY	.30
ACCESSIONS TO 132X DESIGNATOR	35	LT. COMMANDERS	99	DEPT HEAD OPPORTUNITY	1.00
FIRST TOUR LENGTH	46	LIEUTENANTS	278		
		TOTALS	495		

DISTRIBUTION BY GRADE AND ACTIVITY

ACTIVITY	GRADE LT	LCDR	CDR	SEN CDR	TOTAL	ACIP PROJECTIONS	
FLEET TOURS	170	51	17	8	246		
FLEET READINESS SQUADRON	32	4	1	1	38	GATE 1	1.33
TRAINING COMMAND	6	1	0	0	7	GATE 2	1.07
R&D COMMUNITY	6	3	2	0	12	GATE 3	1.31
AFLOAT ASSIGNMENTS	2	7	7	1	17		
PROFESSIONAL EDUCATION	11	3	5	0	19		
OTHER	32	7	30	7	76		
NON-AVIATION ASSIGNMENTS	15	24	8	30	77	NON-AVIATION	16 %
LOWER GRADE FILLS		19	6			HI UP DETAIL (LCDR)	20%

TOTAL ANNUAL PCS MOVES THIS COMMUNITY 226

SUMMARY DATA

ELECTRONIC WARFARE COMMUNITY
NAVAL FLIGHT OFFICERS

RETENTION	74 %	NUMBER OF SQUADRONS	11
		AIRCRAFT PER SQUADRON	4
PLOWBACK FRACTION	5 %	CREW FACTOR	1.50
		NAVAL FLIGHT OFFICERS PER CREW	3.00

COMMUNITY POPULATION

ACCESSIONS TO TRAINING (137X)	33	SENIOR COMMANDERS	61		
		COMMANDERS	82	COMMAND OPPORTUNITY	.25
ACCESSIONS TO 132X DESIGNATOR	47	LT. COMMANDERS	122	DEPT HEAD OPPORTUNITY	.77
FIRST TOUR LENGTH	46	LIEUTENANTS	335		
		TOTALS	600		

DISTRIBUTION BY GRADE AND ACTIVITY

ACTIVITY	GRADE LT	LCDR	CDR	SEN CDR	TOTAL	ACIP PROJECTIONS	
FLEET TOURS	204	51	10	9	273		
FLEET READINESS SQUADRON	75	1	0	1	77	GATE 1	1.44
TRAINING COMMAND	8	1	0	0	9	GATE 2	1.08
R&D COMMUNITY	9	3	1	0	14	GATE 3	1.32
AFLOAT ASSIGNMENTS	5	8	3	2	19		
PROFESSIONAL EDUCATION	13	3	5	2	24		
OTHER	14	35	29	7	85		
NON-AVIATION ASSIGNMENTS	6	18	36	38	98	NON-AVIATION	16 %
LOWER GRADE FILLS		19	3			MI UP DETAIL (LCDR)	20%

TOTAL ANNUAL PCS MOVES THIS COMMUNITY 278

SUMMARY DATA

CARRIER BASED ASW COMMUNITY
NAVAL FLIGHT OFFICERS

RETENTION	74 %	NUMBER OF SQUADRONS	11
		AIRCRAFT PER SQUADRON	9
PLOWBACK FRACTION	5 %	CREW FACTOR	1.37
		NAVAL FLIGHT OFFICERS PER CREW	1.60

COMMUNITY POPULATION

ACCESSIONS TO TRAINING (137X)	76	SENIOR COMMANDERS	56		
		COMMANDERS	77	COMMAND OPPORTUNITY	.21
ACCESSIONS TO 132X DESIGNATOR	43	LT. COMMANDERS	108	DEPT HEAD OPPORTUNITY	.84
FIRST TOUR LENGTH	44	LIEUTENANTS	305		
		TOTALS	546		

DISTRIBUTION BY GRADE AND ACTIVITY

ACTIVITY	GRADE LT	LCDR	CDR	SEN CDR	TOTAL	ACIP PROJECTIONS	
FLEET TOURS	181	56	12	6	255		
FLEET READINESS SQUADRON	25	3	0	1	29	GATE 1	1.25
TRAINING COMMAND	7	1	0	0	8	GATE 2	.93
R&D COMMUNITY	9	3	2	0	13	GATE 3	1.19
AFLOAT ASSIGNMENTS	3	7	6	2	19		
PROFESSIONAL EDUCATION	12	4	6	0	21		
OTHER	35	9	33	6	84		
NON-AVIATION ASSIGNMENTS	32	26	20	39	117	NON-AVIATION	21 %
LOWER GRADE FILLS		20	5			HI UP DETAIL (LCDR)	20%

TOTAL ANNUAL PCS MOVES THIS COMMUNITY 253

SUMMARY DATA

FORCE SUPPORT - JET COMMUNITY
NAVAL FLIGHT OFFICERS

RETENTION	74 %		NUMBER OF SQUADRONS	13	
			AIRCRAFT PER SQUADRON	0	
FLOWBACK FRACTION	5 %		CREW FACTOR	0.00	
			NAVAL FLIGHT OFFICERS PER CREW	0.00	

COMMUNITY POPULATION

ACCESSIONS TO TRAINING (137X)	12	SENIOR COMMANDERS	13		
		COMMANDERS	15	COMMAND OPPORTUNITY	.23
ACCESSIONS TO 132X DESIGNATOR	8	LT. COMMANDERS	21	DEPT HEAD OPPORTUNITY	.99
FIRST TOUR LENGTH	76	LIEUTENANTS	58		
		TOTALS	107		

DISTRIBUTION BY GRADE AND ACTIVITY

ACTIVITY	GRADE LT	LCDR	CDR	SEN CDR	TOTAL	ACIP PROJECTIONS	
FLEET TOURS	52	11	3	3	70		
FLEET READINESS SQUADRON	0	0	0	0	0	GATE 1	1.56
TRAINING COMMAND	1	0	0	0	2	GATE 2	1.24
R&D COMMUNITY	1	2	1	0	4	GATE 3	1.51
AFLOAT ASSIGNMENTS	0	0	1	0	1		
PROFESSIONAL EDUCATION	1	1	2	0	4		
OTHER	3	6	8	4	22		
NON-AVIATION ASSIGNMENTS	0	0	1	4	6	NON-AVIATION	6 %

TOTAL ANNUAL PCS MOVES THIS COMMUNITY 51

SUMMARY DATA

EARLY WARNING COMMUNITY
NAVAL FLIGHT OFFICERS

RETENTION	74 %	NUMBER OF SQUADRONS	13
		AIRCRAFT PER SQUADRON	3
PLOWBACK FRACTION	5 %	CREW FACTOR	1.66
		NAVAL FLIGHT OFFICERS PER CREW	3.00

COMMUNITY POPULATION

ACCESSIONS TO TRAINING (137X)	61	SENIOR COMMANDERS	52		
		COMMANDERS	74	COMMAND OPPORTUNITY	.32
ACCESSIONS TO 132X DESIGNATOR	40	LT. COMMANDERS	102	DEPT HEAD OPPORTUNITY	.39
FIRST TOUR LENGTH	45	LIEUTENANTS	283		
		TOTALS	511		

DISTRIBUTION BY GRADE AND ACTIVITY

ACTIVITY	GRADE LT	LCDR	CDR	SEN CDR	TOTAL	ACIP PROJECTIONS	
FLEET TOURS	171	43	12	6	232		
FLEET READINESS SQUADRON	34	3	1	1	39	GATE 1	1.27
TRAINING COMMAND	4	2	1	0	7	GATE 2	.99
R&D COMMUNITY	7	3	1	0	11	GATE 3	1.21
AFLOAT ASSIGNMENTS	3	8	5	1	16		
PROFESSIONAL EDUCATION	11	3	6	0	20		
OTHER	30	12	25	4	72		
NON-AVIATION ASSIGNMENTS	23	29	25	37	114	NON-AVIATION	22 %
LOWER GRADE FILLS		16	6			HI UP DETAIL (LCDR)	20%

TOTAL ANNUAL PCS MOVES THIS COMMUNITY 216

SUMMARY DATA

MARITIME PATROL COMMUNITY
NAVAL FLIGHT OFFICERS

RETENTION	74 %	NUMBER OF SQUADRONS	24
		AIRCRAFT PER SQUADRON	9
FLOWBACK FRACTION	5 %	CREW FACTOR	1.38
		NAVAL FLIGHT OFFICERS PER CREW	2.00

COMMUNITY POPULATION

ACCESSIONS TO TRAINING (137X)	139	SENIOR COMMANDERS	157		
		COMMANDERS	223	COMMAND OPPORTUNITY	.18
ACCESSIONS TO 132X DESIGNATOR	132	LT. COMMANDERS	334	DEPT HEAD OPPORTUNITY	.52
FIRST TOUR LENGTH	48	LIEUTENANTS	942		
		TOTALS	1666		

DISTRIBUTION BY GRADE AND ACTIVITY

ACTIVITY	GRADE LT	LCDR	CDR	SEN CDR	TOTAL	ACIP PROJECTIONS	
FLEET TOURS	391	119	17	21	748		
FLEET READINESS SQUADRON	59	5	1	1	66	GATE 1	1.19
TRAINING COMMAND	14	1	1	0	16	GATE 2	.91
R&D COMMUNITY	26	7	5	0	37	GATE 3	1.11
AFLOAT ASSIGNMENTS	3	40	1	5	53		
PROFESSIONAL EDUCATION	36	9	15	4	66		
OTHER	100	30	79	26	234		
NON-AVIATION ASSIGNMENTS	110	122	108	106	445	NON-AVIATION	27 %
LOWER GRADE FILLS		47	13			HI UP DETAIL (LCDR)	20%

TOTAL ANNUAL PCS MOVES THIS COMMUNITY 679

SUMMARY DATA

ELECTRONIC WARFARE - VQ COMMUNITY
NAVAL FLIGHT OFFICERS

RETENTION	74 %	NUMBER OF SQUADRONS	4
		AIRCRAFT PER SQUADRON	0
FLOWBACK FRACTION	5 %	CREW FACTOR	0.00
		NAVAL FLIGHT OFFICERS PER CREW	0.00

COMMUNITY POPULATION

ACCESSIONS TO TRAINING (137X)	35	SENIOR COMMANDERS	32		
		COMMANDERS	45	COMMAND OPPORTUNITY	.05
ACCESSIONS TO 132X DESIGNATOR	24	LT. COMMANDERS	52	DEPT HEAD OPPORTUNITY	.19
FIRST TOUR LENGTH	76	LIEUTENANTS	174		
		TOTALS	313		

DISTRIBUTION BY GRADE AND ACTIVITY

ACTIVITY	GRADE LT	LCDR	CDR	SEN CDR	TOTAL	ACIP PROJECTIONS	
FLEET TOURS	155	15	3	1	173		
FLEET READINESS SQUADRON	0	0	0	0	0	GATE 1	1.47
TRAINING COMMAND	3	0	0	0	3	GATE 2	1.04
R&D COMMUNITY	2	5	2	0	9	GATE 3	1.27
AFLOAT ASSIGNMENTS	0	5	1	1	7		
PROFESSIONAL EDUCATION	4	5	4	0	12		
OTHER	10	22	19	7	57		
NON-AVIATION ASSIGNMENTS	1	11	20	21	53	NON-AVIATION	17 %

TOTAL ANNUAL PCS MOVES THIS COMMUNITY 135

SUMMARY DATA

FORCE SUPPORT - PROP COMMUNITY
NAVAL FLIGHT OFFICERS

RETENTION	74 %	NUMBER OF SQUADRONS	2
		AIRCRAFT PER SQUADRON	0
PLOWBACK FRACTION	5 %	CREW FACTOR	0.00
		NAVAL FLIGHT OFFICERS PER CREW	0.00

COMMUNITY POPULATION

ACCESSIONS TO TRAINING (132X)	5	SENIOR COMMANDERS	6		
		COMMANDERS	7	COMMAND OPPORTUNITY	.38
ACCESSIONS TO 132X DESIGNATOR	4	LT. COMMANDERS	10	DEPT HEAD OPPORTUNITY	.78
FIRST TOUR LENGTH	33	LIEUTENANTS	27		
		TOTALS	50		

DISTRIBUTION BY GRADE AND ACTIVITY

ACTIVITY	GRADE LT	LCDR	CDR	SEN CDR	TOTAL
FLEET TOURS	25	4	2	1	32
FLEET READINESS SQUADRON	0	0	0	0	0
TRAINING COMMAND	0	0	0	0	0
R&D COMMUNITY	0	1	0	0	2
AFLOAT ASSIGNMENTS	0	0	0	0	1
PROFESSIONAL EDUCATION	0	1	1	0	2
OTHER	1	3	4	2	10
NON-AVIATION ASSIGNMENTS	0	0	1	2	2

ACIP PROJECTIONS	
GATE 1	1.57
GATE 2	1.23
GATE 3	1.50
NON-AVIATION	4 %

TOTAL ANNUAL PCS MOVES THIS COMMUNITY 21

MULTIPLE RUN SUMMARY 1
1

NAVAL AVIATORS

DISTRIBUTION BY GRADE AND ACTIVITY

ACTIVITY	GRADE LT	LCDR	CDR	TOTAL
FLEET TOURS	3759	978	474	5211
FLEET READINESS SQUADRON	636	83	44	763
TRAINING COMMAND	592	62	51	705
RSS COMMUNITY	125	114	70	369
AFLOAT ASSIGNMENTS	110	134	257	501
PROFESSIONAL EDUCATION	202	59	111	382
OTHER	502	355	1087	1944
NON-AVIATION ASSIGNMENTS	222	122	222	722
TOTALS	5219	1977	2479	10674

TOTAL ANNUAL PCS MOVES 4490

ACCESSION REQUIREMENTS BY TRAINING PIPELINE

	TO TRAINING	TO DESIGNATOR (PTR)
STRIKE	496	353
MARITIME PATROL	336	260
HELICOPTER	395	294
TOTALS	1227	907

MULTIPLE RUN SUMMARY (CONT.)

NAVAL FLIGHT OFFICERS

DISTRIBUTION BY GRADE AND ACTIVITY

ACTIVITY	GRADE			
	LT	LCDR	CDR	TOTAL
FLEET TOURS	1822	422	164	2408
FLEET READINESS SQUADRON	303	26	14	343
TRAINING COMMAND	59	5	5	72
R&D COMMUNITY	74	32	14	120
AFLOAT ASSIGNMENTS	24	87	48	159
PROFESSIONAL EDUCATION	103	34	58	200
OTHER	257	154	346	757
NON-AVIATION ASSIGNMENTS	201	253	570	1024
TOTALS	2848	1016	1219	5083

TOTAL ANNUAL PCS MOVES 2226

ACCESSION REQUIREMENTS BY TRAINING PIPELINE

	TO TRAINING	TO DESIGNATOR (NFOT?)
RADAR INTERCEPT OFFICER	112	63
TACTICAL NAVIGATOR	243	137
ATDS	61	40
NAVIGATOR	222	161
TOTALS	643	401

LIST OF REFERENCES

1. Department of the Navy OPNAV-13-P-1, Unrestricted Line Officer Career Planning Guidebook, U.S. Government Printing Office, Washington, D.C., 1982.

2. Chief of Naval Education and Training Letter 7300: Serial C21 to CDR W.T. Ballew, Subject: Average Cost to Train Naval Aviators, 4 December 1984.

3. Office of the Chief of Naval Operations Letter 5223: Serial OP-130E40B/362141, Subject: Study Directive for Officer Corps Management Study, 4 September 1984.

4. Information Spectrum, Inc. Draft Final Report Contract No. N0014-82-C-0851, Study of the Impact of Permanent Change of Station Support Requirements for the U.S. Navy, June 1984.

5. President's Private Sector Survey on Cost Control, Report on the Department of the Navy, U.S. Government Printing Office, Washington, D.C., 30 September 1983.

6. Naval Postgraduate School Report NPS-54-81-011, Organizational Handling of Midcareer Moves: The Reactions of Navy Line Officers, by James K. Arima, September 1981.

7. Fox, J. Ronald, Arming America: How the U.S. Buys Weapons, Harvard University Press, 1974, eighth reprint edition 1982.

8. Comptroller General of the United States Report B-163058, Report to the Congress on the Acquisition of Major Weapon Systems, U.S. Government Printing Office, Washington, D.C., 18 March 1971.

9. Gansler, Jacques S., The Defense Industry, MIT Press, 1980, first Paperback edition, 1982.

10. Scholes, Michael L., AIRTOURS: Application of an Interactive Computer Model to Analyze the Manpower Requirements and Operational Tour Opportunities of the Aviation Warfare Community, M.S. Thesis, Naval Postgraduate School, Monterey, California, 1980.

11. Department of the Navy, NAVPERS 15839E, Manual of Navy Officer Manpower and Personnel Classifications Major Code Structures, v. 1, U.S. Government Printing Office, Washington, D.C., 27 October 1980.

12. Information Spectrum, Inc. Final Report V-83-2693-02, Aviation Officer Requirements Study, Francis E. O'Conner, 31 August 1983.

13. The Brookings Institution, Support Costs in the Defense Budget: The Submerged One-Third, by Martin Binkin, 1972.

14. Information Spectrum, Inc. Report V-2693-01, Aviation Officer Requirements Study, by Francis E. O'Conner, 31 May 1982.

15. Morris, E.L., Jr., An Analysis of Officer Professional Development in the VP (Maritime Patrol) Aviation Community with Application of an Interactive Computer Model for Sea Tour Opportunity Determination, M.S. Thesis, Naval Postgraduate School, Monterey, California, June 1980.

16. Department of the Navy, Naval Military Personnel Manual, U.S. Government Printing Office, Washington, D.C., 1984.

17. House Armed Services Committee H.R. 5167, Defense Department Authorization and Oversight Hearings Military Personnel, U.S. Government Printing Office, Washington, D.C., March 1984.

18. U.S. General Accounting Office Letter to the Honorable Jamie L. Whitten, Chairman, Committee of Appropriations House of Representatives, Subject: Permanent Change of Station (PCS) Policies and Practices in the Department of Defense, 27 September 1983.

19. Office of the Assistant Secretary of Defense (Manpower, Installations and Logistics), Permanent Change of Station (PCS) Study, September 1983.

INITIAL DISTRIBUTION LIST

		No. Copies
1.	Defense Technical Information Center Cameron Station Alexandria, Virginia 22314	2
2.	Library, Code 0142 Naval Postgraduate School Monterey, California 93943	2
3.	Dr. Paul R. Milch, Code 55 Department of Operations Research Naval Postgraduate School Monterey, California 93943	3
4.	Dr. Paul Carrick, Code 54 Department of Administrative Sciences Naval Postgraduate School Monterey, California 93943	1
5.	Mr. Francis E. O'Conner c/o Information Spectrum, Inc. 1745 S. Jefferson Davis Highway Arlington, Virginia 22202	1
6.	CDR. Elizabeth Sutton (NMPC-4632) Naval Military Personnel Command Washington, D.C. 20370	1
7.	CDR. Charles Stoutt (OP-132H1) Office of DCNO (MPT) Arlington Annex Washington, D.C. 20370	1
8.	CDR. Skip Sterling (OP-130E2) Office of DCNO (MPT) Arlington Annex Washington, D.C. 20370	1
9.	LCDR. George Parish III (OP-130E40B) Office of DCNO (MPT) Arlington Annex Washington, D.C. 20370	2

10. Ms. Charlotte Byers (Code 01A) 1
Commander, Training Pacific
San Diego, California 92147

11. CDR. W. Thomas Ballew (MAT-01F3) 1
Department of the Navy
Headquarters, Naval Material Command
Washington, D.C. 20360

12. CAPT. J. Robert Ballew 1
S. 5506 Pittsburg
Spokane, Washington 99203

210105

Th
B2
c.

210105

Thesis
B2005 Ballew
c.1 A cost efficiency study of aviation officer career patterns and permanent change of station movements.

30 JUL 87 38213
14 JUN 90 36119
14 JUN 90 36119
14 JUN 90 36119

210105

Thesis
B2005 Ballew
c.1 A cost efficiency study of aviation officer career patterns and permanent change of station movements.

thesB2005
A cost efficiency study of aviation offi
3 2768 001 91241 3
DUDLEY KNOX LIBRARY